

**An Investigation of Students' Perceptions of Academic Reading
Difficulties and Their Association with English Language Proficiency.**

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Signature: Hana AlRasheed

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Abstract

This mixed method study was conducted in two phases to investigate ESL students' academic reading. The aim of the first phase was to understand the academic reading practices of ESL students pursuing their postgraduate studies at one university in the UK. The first phase also provided insights into students' perceptions of the academic reading difficulties they encountered along with the strategies they adopted to overcome these difficulties.

Changes over time in students' perceptions of academic reading practices in addition to difficulties and the ways in which they implemented strategies to overcome them were also traced. In the second phase, the focus shifted to seek generalisation of the first phase findings with regard to academic reading. Furthermore, the second phase investigated the association between English language proficiency and students' perceptions of academic reading difficulties. The study adopted an exploratory sequential mixed method design. In the first phase, two separate rounds of think aloud protocol and semi-structured interviews were used to collect data from nine ESL students pursuing their postgraduate studies.

The results of this phase were used to develop a scale of the perceived level of academic reading difficulties to web-survey a wider ESL community at the university. In the second phase, 77 ESL postgraduate students in their first year of academic programmes responded to the survey. A key finding that emerged from the first phase is that ESL postgraduate students encountered a wide array of difficulties that did not stem solely from their lack of English language proficiency; rather, some were the result of a lack of other skills including cognitive skills, key content knowledge and academic skills. In addition, ESL students showed changes over time not only with regard to

academic reading practices, but also in terms of certain difficulties being alleviated. The results of the second phase supported the findings of the first phase as they suggested that IELTS is a moderate predictor of students' perceptions of academic reading difficulties. In addition to students' linguistic ability, ESL students need to be equipped with skills that enable them to operate successfully at the university.

The main lesson learnt is that the readiness of ESL students to pursue their studies in a UK university was questionable, but over time they demonstrated that they had learnt through different forms of interactions in academia.

Sociocultural theory is used to explain the changes over time that students reported in their academic reading practices and difficulties. This study viewed reading as a social practice as students improved through their participation in academic activities. In addition, a model was suggested to conceptualize ESL students' university readiness. Recommendations for improving students' readiness and for further research were suggested.

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Chapter 1: Introduction

1.1. Background of the Problem

In higher education, and particularly at the postgraduate level, the self-learning style of study increases the importance of reading. Reading comprises the main source of input, as students are required to read efficiently in order to successfully meet the requirements of study (Weir, Hawkey, Green, Unaldi, & Devi, 2009). Reading in the academic context incorporates a wide range of skills and strategies; thus, it is a complex process. If we understand that such a complex process causes a number of difficulties for native speakers when they read for academic purposes (Berman & Cheng, 2001), then it is not surprising that it also leads to several difficulties for those pursuing their studies in English as a second language.

Reading in English as a second language at different levels of proficiency has been the subject of several works of research. Many empirical studies have been dedicated to enhancing students' experience with reading in the second language through the exploration of difficulties experienced by students while reading for academic purposes. In this regard, a number of studies have identified potential sources of difficulties (Auerbach & Pakiston, 1997; Berman & Cheng, 2010; Briguglio, 1998; Cheng, 1996; Evans & Morrison, 2010; Hirano, 2014; Li & Chun, 2015; Mckee, 2012; Shen, 2013; Sheory & Mokhtari, 1994; Son & Park, 2014; Terraschke & Wahid, 2011; Weir, Hawkey, Green, Unaldi & Devi, 2009). Such a focus has received researchers' attention for study in both English-speaking and non-English-speaking communities, and among students from different backgrounds.

This study investigated the academic reading of ESL postgraduate students. It was conducted at one UK University that receives a number of

international students every year. Coming from different backgrounds with different linguistic abilities, these students join English universities to major in a variety of specialties in which English is used as the language of instruction. For many of those students English is an additional language, which makes it essential on the part of the universities to measure the students' language proficiency using a standardized test such as the International English Language Testing System (IELTS) in order to make sure that they have the required level of language proficiency. Each college determines a specific benchmark for the IELTS as an entry requirement. Students' English language proficiency as indicated by IELTS scores can undoubtedly shape the subsequent academic opportunities for international students. What receives researchers' attention is whether the achievement of such a benchmark predicts academic success. Indeed, a large body of research has been carried out with this focus (Arrigoni and Clark, 2015; Avdi, 2011; Bayliss and Ingram, 2007; Cotton and Conrow, 1998; Dooey and Oliver, 2002; Feast, 2002; Hill,, Storch and Lynch (1999); Humphreys, Haugh, Fenton-Smith, Lobo Michael and Walkinshaw, 2012; Kerstjens and Nery, 2000; Oliver, Vanderford and Grote, 2012; Paul, 2007; Schoepp, 2018; Ushioda and Harsch, 2011; Weir et al., 2009; Woodrow, 2006; Yixin and Daller, 2014). However, the results of these studies are conflicting.

Thus, it would be insightful to examine the relationship between students' English language proficiency (as measured by IELTS scores, particularly on the reading module), and their total perceived level of academic reading difficulties to determine how their proficiency affect their perceptions about academic experience.

1.2. Rationale of the Study

1.2.1. Academic reading practices.

In higher education, reading works as the main source of disciplinary knowledge for students. Given this, it is extremely important to check how students approach academic texts. To the best of my knowledge, little published research has addressed this area. In most of the available studies, reading practices were investigated in non-ESL contexts. Only two studies have investigated ESL reading practices in an academic context (Weir et al., 2009; Walker, 2013); however, only that of Weir et al. (2009) involved in its sample postgraduate students who were already studying and engaged in academic reading in their disciplines, whereas Walker's study (2013) recruited students who were enrolled in a pre-sessional course, where the nature of the language course was unlikely to closely resemble reading in academic programmes. All of these considerations contribute to the need to explore the academic reading practices of ESL postgraduate students.

1.2.2. Academic reading difficulties.

In general, an increasing number of international postgraduate students have been admitted to many universities in the UK. For these students, the use of English in academic study is not a trivial challenge. Therefore, ESL students' difficulties in reading have been investigated in a considerable number of studies. However, these studies focussed primarily on ESL undergraduate students and their abilities to cope with difficulties to succeed academically. A limited number of studies involved postgraduate students (Wahid & Terraschke, 2011; Briguglio, 1998; Weir et al., 2009; Berman & Cheng, 2001; Son & Park, 2014; Mckee, 2012; Cheng, 1995). Furthermore, the postgraduate experience

may be different from that of undergraduates; hence the need to investigate postgraduate ESL students' difficulties with academic reading and how they cope with them.

1.2.3. The investigation of association between students' English language proficiency and their perceptions of academic reading

A number of studies have investigated the relationship between students' English language proficiency as measured by IELTS and their subsequent academic performance or experience. These studies have yielded contradictory results, ranging from low correlation to results indicating a significantly high or medium correlated relationship. As students' English language proficiency is measured by IELTS, it should also be noted that the IELTS has undergone certain changes since it was introduced, especially in its reading modules. In 1995, one academic reading module replaced the specialised modules that were designed to test skills suited to the candidates' chosen course of study (History of IELTS, 2015). Accordingly, some of the available literature focussed on the old versions of the IELTS. In this regard, and in light of the mixed results, there was a need to investigate the association between students' English language proficiency as measured by IELTS (in its new edition) and their perceptions of academic reading difficulties.

Typically, most of the studies that investigated the effects of English language proficiency (as measured by IELTS) on students' academic experience looked for a statistical correlation between students' IELTS scores and their subsequent success or academic performance. The present study, on the other hand, involved a statistical comparison of the IELTS scores and the total level of difficulty as perceived by postgraduate students.

The rationale for using both qualitative and quantitative data was to explore this less-examined area through the use of first-phase findings to work as a springboard to formulate the second-phase data collection method. Therefore, the first phase explored students' views of academic reading difficulties and the strategies they adopted to cope with them, with the intent of building on these views with a quantitative method, namely a web survey, to investigate the problems of a wider community of ESL students at the same University and the correlational relationship. In addition, the use of the two strands of data is more likely to yield unique results that could not be found through the use of mono-method research.

1.3. Purpose of the Study

The study aimed to identify the academic reading practices of ESL postgraduate students in one UK university. It also aimed to identify the ESL students' perceptions about the difficulties they encountered while reading for academic purposes. Moreover, the study aimed to identify the strategies that students employed to overcome the reading difficulties along with the changes overtime in students' perceptions about their difficulties. To achieve these aims, think aloud protocol and semi-structured interviews were used in the first phase. Also, as IELTS is used to measure ESL linguistic proficiency, the study examined the relationship between students' English language proficiency as measured by IELTS and the total perceived level of academic reading difficulties. In this phase, the web survey was used to examine correlation.

1.4. Significance of the Study

Keeping in mind the importance of reading in English for academic purposes for university students, the present study addressed this area, emphasizing ESL postgraduate students' practices of academic reading and the

difficulties they encounter and how they cope with them. The correlational relationship between students' English language proficiency and their perceptions of academic reading difficulties was also investigated.

The present study findings may be beneficial in informing either policy or practice. They are deemed insightful for many stakeholders and in many ways. In the first place, the findings can be insightful for the ESL postgraduate students to review their current academic reading practices. It can also inspire them with many strategies that can be used to overcome academic reading difficulties. In addition, it is important to determine the answers for the research questions, as this may enable university professors, lecturers and English language tutors to better understand what it means when postgraduate students read in a second language. This understanding may also enable the university staff to reconsider their support to meet ESL students' needs.

The study findings provide information for those who make decisions regarding admission to universities. Their attention can be drawn to the admission requirements that are currently in place and to the measures currently used to assess students' eligibility to be admitted to postgraduate programmes in international universities. Furthermore, those who make decisions about the kinds of courses students need to enrol on to ensure that they are ready to engage in postgraduate studies with no anticipated difficulties are likely to find this study insightful.

In a wider context, EAP course designers may also benefit from the results of this study. ESL postgraduate students need to acquire academic reading skills to enable them to approach academic texts. The identification of these skills that this study helps elucidate may guide EAP course designers to assign more emphasis to these reading skills.

1.5. Research Questions

The present study aimed to answer a number of questions about the academic reading of ESL students in two phases. It is worth noting that most of the first phase questions were subsequently investigated in the second phase. However, one question was only answered in the first phase which discusses academic reading practices.

1.5.1. First phase questions.

- What are the academic reading practices of ESL postgraduate students?
- How do ESL postgraduate students perceive their English language proficiency?
- What are the difficulties that ESL postgraduate students encounter while they read for academic purposes? How do they cope with these difficulties?
- What changes over time in students' perceptions of English language proficiency, academic reading practices and difficulties can be found?

1.5.2. Second phase questions.

- In a wider community of ESL postgraduate students at the same University, how do they perceive their English language proficiency?
- In a wider community of ESL postgraduate students at the same University, what are the difficulties they encounter while they read for academic purposes? How do they cope with these difficulties?

- What is the relationship between international students' English language proficiency as measured by IELTS and their total perceived level of academic reading difficulties?
- To what extent do the survey data confirm the findings in the first phase related to students' perceptions of their English language proficiency, academic reading difficulties and the strategies they apply to cope with them?

1.6. Research Design

The study implemented an exploratory sequential mixed methods design. In the first phase, think aloud protocol and semi-structured interviews were used in two rounds to collect data. The results of the first phase were used to inform the design of the web survey that was used in the second phase. The chart in Figure 1 summarises the research design.

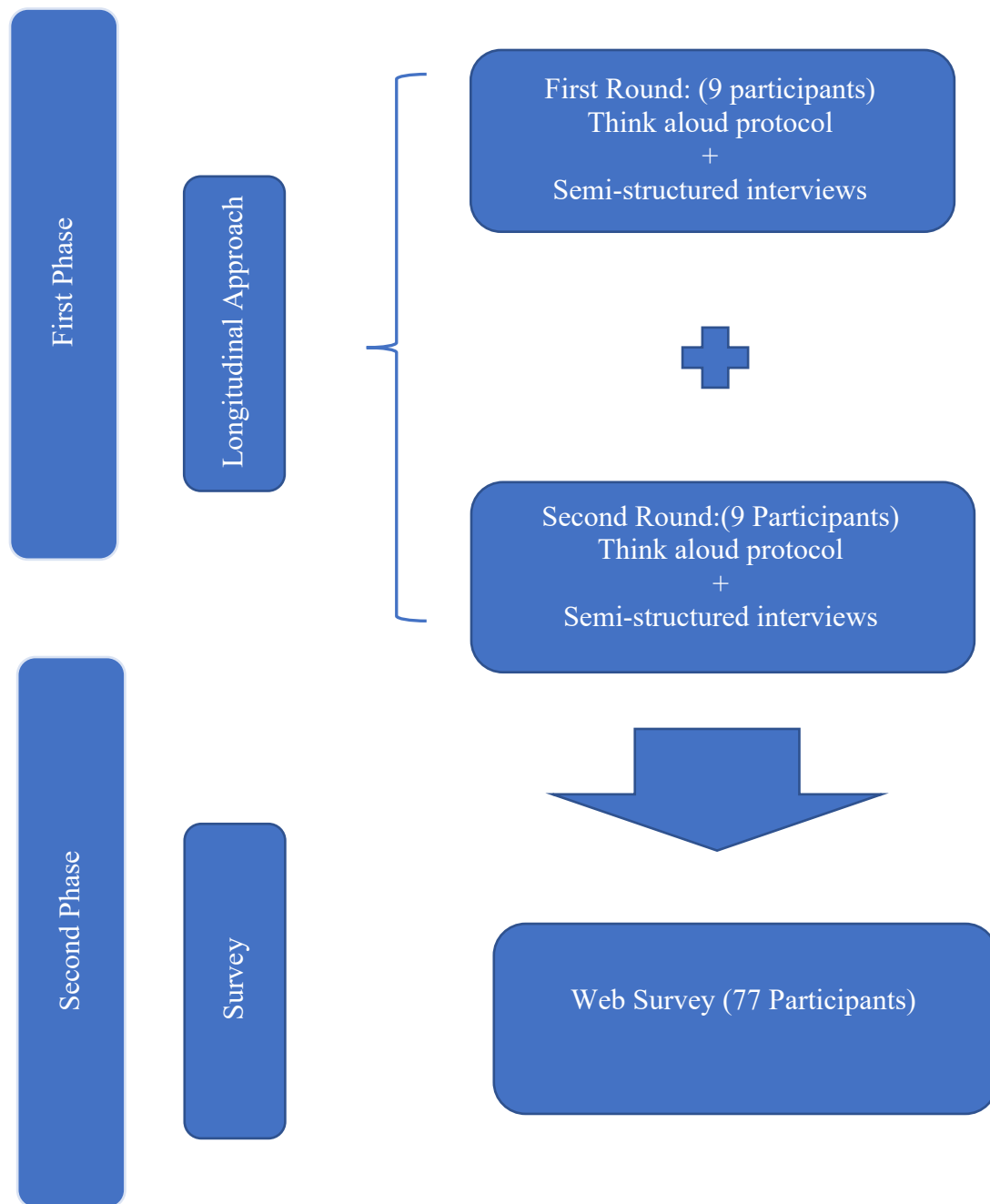


Figure 1. Summary of research design

1.7. Abbreviations and Definitions of Terms

The following is a list of abbreviations employed in this study. Some of them were only used when previous studies were reviewed and are employed in the same way they appeared in these studies.

Table 1

Abbreviation

| Abbreviation | Meaning |
|---------------------|---|
| EAL | English as additional language |
| EAP | English for academic purposes |
| EFL | English as a foreign language |
| EL1 | English as a first language |
| ESL | English as a second language |
| ELTS | English language testing service |
| GPA | Grade point average |
| IELTS | International English language testing system |
| L1 | First language |
| L2 | Second language |
| NESB | Non-English speaking background |
| NNS | Non-native speakers of English language |
| NS | Native speakers of English language |
| TAP | Think aloud protocol |

Chapter 2: Literature Review

This literature review chapter aims to situate the present study in its context, which is internationalisation. In addition, it discusses how reading is viewed in general, and, in this regard, the two commonly held models of reading are presented. Furthermore, some alternative models of L2 reading processes will be reviewed. Most importantly, this chapter will examine reading as one of the cultural practices of literacy that can be viewed as either autonomous or ideological. In the present study, it is argued that reading in this specific context reflects the ideological literacy characterized as being affected by social factors and a subsequent rationale for viewing reading within sociocultural theory will be presented. Given that most reading models found in the corresponding literature focus on reading in the first language, and the present study is researching reading in a second language context, a comparison between readings in first and second languages will be made.

In order to establish the rationale for the present study and locate a gap in the available literature, the relevant studies investigating reading practices, difficulties in higher education and the means by which students cope with them are reviewed. Finally, how students' English language proficiency relates to their performance at university is discussed.

2.1. Internationalisation

In the context of the globalisation that characterises the current era, higher education has become more engaged in internationalisation activities (Altbach & Knight, 2007). These internationalising practices have gained popularity and have been observed across different countries (Reid, Stadler,

Spencer-Oatey & Ewington, 2010). However, most services related to this aspect in higher education have been provided in developed countries, English-language speaking nations and a number of other European countries (Altbach & Knight, 2007). It has different aims and is translated in various practices in higher education. These aims and practices of internationalisation are discussed below. In addition, since the context of the present study is that of an institution of higher education in the UK, it is of particular significance to shed light on the experience of the UK together with the advantages and challenges for all those involved.

A broad spectrum of aims can be perceived as rationales on the part of governments for adopting internationalisation as a strategy in higher education. In addition to economic benefits, a further advantage relates to academic improvement and cooperation (Knight, 2003). Nonetheless, internationalisation has undergone a change and these aims have changed from cooperation into competition and commercialisation (Knight, 2013). In the light of these new rationales, there is a call to abide by the ethical implications of internationalisation to ensure the utmost benefits for all those involved (Hoey, 2016).

Different practices have been put into place in order to implement internationalisation successfully, for instance, the emergence of electronic learning, overseas campuses, and student and staff mobility (Altbach & Knight, 2007). The establishment of exchange programmes, the internationalising of curricular content and the engagement of social events can also be seen as practices of internationalisation (Reid et al., 2010).

Many higher education institutions in different countries introduce these practices to implement internationalisation. The UK government has shown an interest in internationalisation; however, this has not been translated into clear strategies and policies in the higher education agenda (Reid et al., 2010). As a result, it is likely that UK universities vary considerably in the way they implement governmental initiatives. Overall, UK universities are considered recruiters of international students whether from other European countries or elsewhere (Reid et al., 2010).

According to the first statistical release from the Higher Education Statistical Agency (HESA) (2016, 2017), the percentage of international students in the United Kingdom, including EU and non-EU students, experienced no change and remained as it was in 2015/2016 (Higher Education Students Statistics: 2018). In that year (2016/2017) there were 442,750 students of different backgrounds (EU and non-EU students) studying in different modes, both at undergraduate and post graduate levels (Higher Education Students Statistics: 2018). In the same year, the enrolment of students in UK Higher Education studying wholly overseas in Europe and outside Europe was 707,915. It can be concluded from these numbers the extent to which UK higher education institutions have implemented the practices of internationalisation.

Due to the high enrolment of international students at UK universities, internationalisation has become a prominent concern of higher education. Diversity in the student body is seen as advantageous in many respects both for local and international students, providing the students are well-engaged in the learning and development process. For example, for international students, their competence in English can be developed (Briguglio, 2011). Moreover, the

process can be beneficial as it naturally helps students develop cultural understanding, exposes students to other varieties of English, and also makes them proficient in intercultural communication (Briguglio, 2011). Indeed, helping students to be interculturally skilled is one of the rationales for some institutions to embrace internationalisation (Knight, 2013).

Although raising an institution's international identity brings benefits, internationalisation simultaneously introduces pitfalls, such as dealing with students from different backgrounds with different levels of proficiency in English, a reality that imposes considerable pressure on both an institution's faculty and administration. In addition to accommodating international students in different respects e.g., reviewing pedagogical approaches, it also puts pressure on the universities to support teaching with suitable infrastructures that would ultimately facilitate the process of learning (Reid et al., 2010). Since linguistic proficiency is a concern at these universities, English language support for both under- and postgraduate international students is usually offered, clearly an attempt by universities to ensure that the international students can function well linguistically. However, international students need sustained support, not only linguistically but also culturally (Briguglio, 2011). This notion implies the importance of students' being engaged in different activities so as to raise their awareness of academic conventions, interpersonal discourse conventions, and awareness of cultural context and how it impacts communication (Briguglio, 2011). Thus a larger goal of a cross-cultural international community needs to be emphasised through the development of staff and students (Briguglio, 1998). This undertaking can take many forms, but a common method is mixing international and local students through curricular and extra-curricular activities (Briguglio, 1998). Such kinds of activities move

students from a place of international awareness to one of international expertise (Briguglio, 2011).

As previously mentioned, teaching students at disparate levels of English proficiency imposes formidable challenges. In addition to the responsibilities inherent in serving the diverse linguistic needs of international students on the part of institutions, it necessitates the use of certain measures to ensure their readiness for study: for instance, the use of standardized language tests as a prerequisite for university entry. Furthermore, international students themselves encounter several difficulties, as the academic context in which they find themselves is probably different from that with which they are familiar. These difficulties, from a researcher's point of view, are worthy of exploring as they significantly influence students' academic experiences.

2.2. Reading

Reading is integral to literacy. Developing a student's reading proficiency is one of the core objectives of any educational system because it helps students connect to the subject matter. To be specific, reading is one of the main sources of input a student can utilize to add to his or her expertise in a discipline. Given this, it is important to examine the reading process, how it is viewed in general, what the different models of reading are and what it involves in an academic context.

Reading is sometimes misinterpreted as being synonymous with "decoding". Decoding is related to the phonological aspect of the word and is one constituent of word recognition. It is a basic process as no reader can be said to read without first being able to get the words from print (Lundberg, 1991). While considered an important step, the ultimate goal of reading is not to transfer letters into sounds or even to know the meaning of discrete words,

usually referred to as an awareness of the semantic constituent of word recognition. The ultimate goal of reading is to derive meaning from the whole text, commonly known as “comprehension”. However, this is not adequate to describe the complex process of reading as it does not reflect the whole process.

In the scholarly corpus of literature on reading, the actual definition of reading is a controversial matter. For some, reading refers to the ability of the reader to draw out and interpret the information that has been given in a text (Grabe & Stoller, 2011). Alternatively, for others it refers to the interaction that occurs between the reader and the text he or she is reading (Alderson, 2005). So, in the broadest sense, reading can be defined as eliciting the cohesive meaning of the text; but the problem persists, as this definition cannot reflect the process of reading. Not only do the aforementioned definitions of reading overlook the different processes of reading but they fail to address whether the meaning extracted by the reader is relevant to the intended message of the writer of the text. As these concepts are relevant and can dramatically change the product of reading, it would be a more useful conceptualisation to discuss different models of reading.

2.2.1. Models of reading.

In the literature on reading, it is common to find the processes of reading falling under different headings, for example “models” or “approaches”, meaning an ‘imagined representation of reading process’ that ‘provides a paradigm against which aspects of reading process may be tested’ (Barnett, 1989, p.10). Such an analytic approach that breaks reading into different components is helpful in two respects. First, it makes it much easier for researchers to understand the accomplishment of these stages on the part of the reader and to

anticipate, in some situations, the possibility of further accomplishment. To exemplify, the reader's ability to comprehend a text is rendered predictable based on the accomplishment of lower processes such as phonological, syntactic, or orthographical awareness of the words comprising a text. Second, the conclusions based on our understanding of what has been achieved in this regard may help researchers identify the problematic areas and sources of difficulties a reader encounters while he or she reads, and act accordingly to address their needs.

There are different views of reading. One possible way of looking at reading is as two processes (models or approaches). These processing types are known as the "bottom-up" and "top-down" approaches. The bottom-up model is derived from data-driven processing much like that which happens when a reader begins with the printed words or 'visual data' and then moves to extracting meaning through a series of subsequent processes (Lundberg, 1991; Alderson, 2005; Grabe, 2009): the reader, as he or she reads, constructs the meaning and ends up with an exhaustive meaning of the text or the overall message. However, this traditional view of reading is considered defective and is seen as a passive process for its over-reliance on the linguistic aspects of the text (Lally, 1998). It fails to explain a number of empirical findings in the reading literature (Stanovich, 1980); for instance, it fails to capture the process of reading when a reader is capable of recognising the words but unable to construct the meaning of what he/she reads. This model depends too heavily on the linguistic cues of the text and, thus, paved the way for a competing top-down model to emerge.

Because the first model has been criticized for its reliance solely on linguistic cues, Goodman (1967) proposes a new model that requires the reader

to depend partially on linguistic cues upon which a decision about the text is made that needs to be verified or rejected. In a more straightforward way, it can be described as a 'guessing game' (Goodman, 1967, p. 129). In this approach, the reader starts reading with a specific hypothesis in mind about the text and keeps testing this hypothesis against visual data (Lundberg, 1991). This model emphasizes the reader's prior knowledge and the activating of the existing schemata. As it is largely dependent on the reader's background, it is therefore described as a reader-driven model (Lally, 1998). Whether it is known as the top-down or reader-driven model, the role of the reader and his or her active participation in the reading process are emphasized. It is worth noting that this model was suggested by Goodman mainly to explain reading in L1, however, it is used in literature to explain reading in L2 (Grabe, 1991). In L2 context, Coady enhances this model to make it more suitable to describe reading in L2 as a process that includes process strategies, background knowledge and conceptual abilities.

To sum up, central to the bottom-up approach is the use of word recognition constituents to arrive at the intended meaning of the text. Many subskills fall under the umbrella of word recognition: orthographic processing, phonological processing, semantic processing (Grabe, 2009). On the other hand, the top-down model relies heavily on the reader's own background knowledge of the topic and the extent to which the reader is capable of activating existing schemata, i.e. the 'networks of information stored in the brain which acts as filters for incoming information', and classifying the incoming information into these networks to achieve comprehension properly (Alderson, 2005, p.17).

This leads to the question of whether such a division is oversimplifying the process of reading. Indeed, these classifications or models of reading show reading as a process that happens at two discrete levels, whereas reading possesses a complex nature that might cause many processes to overlap. In addition, criticism of these models has been made suggesting that they are inadequate in capturing the complex nature of reading. Just as the bottom-up model has been criticised for its inability to justify several empirical findings in the reading research, the plausibility of the top-down model has also been questioned. It cannot explain the process of efficient reading due to the time needed for generating a hypothesis and testing it, which is probably longer than the time needed to recognize the words in the text (Stanovich, 1980). The consideration of this drawback has led to the emergence of yet another model, which seems more capable of explaining the process of reading: the interactive model.

The interactive model refers to a fluctuation between the two approaches in a parallel way; it is also bound up with another kind of interaction that happens between the text and the reader (Lally, 1998). It can be described as the use of different knowledge sources by the reader to understand the text (Stanovitch, 1980). In this way, the reader is neither confined to the word-recognition constituents nor is he or she confined to top-down processing skills to determine what is being conveyed in the text. In L2 context, Eskey advocated this model to explain reading (1988). Eskey (1988, p.98) argued that 'fluent reading entails both skilful decoding and relating the information so obtained to the readers prior knowledge of the subject and the world'. Nonetheless, it is also rejected by some as it represents a contradiction (Grabe & Stoller, 2011). For the bottom-up processes, word-recognition constituents are executed in an

automatized manner with little interference from the top-down processes that activate background knowledge. The activation of the background knowledge takes time and this is likely to slow down the processing, making it inefficient (Grabe & Stoller, 2011). Therefore, a modified interactive model has been suggested by Stanovich (1980).

As suggested by Stanovich's model (1980), efficient reading processes are developed by the reader and regular interaction takes place between less automatic processes (Grabe & Stoller, 2011). The fluctuation between bottom-up and top-down models takes place specifically when the reader, while reading a text, feels the need to "compensate" for a deficit in one of the processes (Alderson, 2005); hence the name 'interactive compensatory model'. In other words, the reader is likely to rely heavily on other knowledge sources if the previously used source is deficient, regardless of the classification of this source as being of a higher or lower level (Stanovich, 1980), whereas in the interactive model, discussed earlier, the reader simultaneously uses different knowledge sources. This constitutes the difference between the two models (Stanovich, 1980). In L2 context, Bernhardt (2005) argued that the compensatory model is more satisfying model. It acknowledges the influence of L1 literacy, L2 language knowledge and other dimensions including comprehension strategies, domain knowledge, motivation and interest. They function in synergistic manner and therefore reading is viewed as ' juggling or switching process in cognition' (Bernhardt, 2005, p.140).

In addition to the bottom-up, top-down and interactive models reading can be viewed in a different way. Reading can be defined as comprised of decoding and another two models: text information building and situational model construction (Koda, 2005). These are also known as the text model and

the situational model. Building a text model of comprehension involves the coordination of the main ideas intended by the text writer (Grabe, 2009). This contrasts with what the situational model refers to as the reader's interpretations of the text (Grabe & Stoller, 2011). Obviously, the second model is affected by the reader's background and attitudes towards the text ideas. Thus, without adequate background knowledge about the topic or the implied attitudes towards it, the reader will alternatively try to formulate the text model and reinforce it as it does not need background information for its formulation (Grabe, 2009).

The developmental view is another way of viewing reading. It maintains that reading requires mastery of its components, and that one component is a threshold for another (Koda, 2005); thus, they do not develop in parallel (Koda, 2005). This view states that the two main constituents that comprise the complex skill of reading are decoding and comprehension (Grabe, 2009; Alderson, 2005; Koda, 2005). Comprehension here refers to a family of skills that will enable the reader to interpret the information, interconnect different parts, and form a coherent meaning of the text (Grabe, 2009).

In addition to the cognitive and developmental views of reading that have been discussed above, viewing reading from a functional perspective is another explanation of reading. Within a functional-driven view of reading, by setting a specific goal of reading, a reader will respond accordingly and this determines the level of engagement with the text: whether to look for specific information or to obtain the gist. In this way, reading purposes determine how to interact with the text (Grabe & Stoller, 2011; Koda, 2005); in other words different reading approaches result from different reading purposes. These purposes include reading to find a specific piece of information (scanning), to skim a text quickly

to obtain the gist, to learn from the text, to integrate information, to write about a specific topic, to critique a text, and finally to comprehend the text whether for the aforementioned purposes or merely for pleasure (Grabe & Stoller, 2011). Carver (1992:85) called these purposes “reading gears” and he argued that these reading gears affect the reading rate considerably. When reading requires higher processes in the classification that he proposed, the reading gear moves higher; conversely, the reading rate is lower when reading requires lower processes, such as in memorizing, and the reading gears move downwards. Thus, reader-purpose is an influential factor that greatly affects the reader’s performance (Grabe, 2009).

In an academic orientation, all of the above mentioned purposes of reading are present to reflect the aims when reading academically (Grabe, 2009). Thus, these classifications of purposes of reading in general are not dissimilar to the purposes in a non-academic setting. However, in an academic setting, reading is mostly directed towards further purposes such as integration aims, evaluation and critique. The most typical example of this is when students read and synthesize information from different sources. Although reading gears that have been suggested by Carver (1992) were primarily discussed in relation to their effects on reading rate, confining reading purposes to these five gears (memorizing, learning, ‘rauding’, which refers to reading and ‘auding’ for comprehension, skimming and scanning) makes this classification of purposes partially applicable in an academic orientation where students can read for other academic purposes.

In conclusion, reading, as discussed in the scholarly literature, is considered and viewed from different angles. Besides the two primary models of reading, namely the bottom-up and top-down models, and the interactive and

the interactive-compensatory model, there are other ways of identifying the process of reading: the cognitive view, under which the establishment of a text model and situation model is discussed; the developmental view, which perceives reading as composed of two consequent steps, decoding and comprehension; and the functional perspective, which emphasizes the purposes of reading . Upon considering these different perspectives of reading, it can be inferred that not only can reading be seen in different ways depending on the context and the purpose of reading, but it is also more complex in that it does not merely mean a combination of decoding and comprehension as suggested by Alderson (2005). Based on the views and models that have been discussed, none of them can wholly reflect the process of reading in an academic context. Therefore, reading as a social practice will be presented in the next section to explain how reading is viewed in this study.

2.2.2. Literacy as a social practice.

There are different views on the way in which literacy is perceived (Gee, 2008; Street, 1999). One divide among scholars is between those who view literacy as an autonomous cognitive practice and those who advocate an ideological model of it (Gee, 2008; Street, 1999). The traditional model of literacy treated it as a purely cognitive ability or solely linguistic skill unaffected by, and uninfluential on, the relationship between humans (Gee, 2008). As Street (1999) has pointed out, this view artificially separates literacy from its social context and implies that time and place have no impact on it.

The meaning of “literacy” has evolved as the new meaning tries to overcome the drawbacks of the traditional view. The early description of literacy emphasizes the ability to read and write in addition to constructing interpretations of given texts as the main cultural practices (Gee, 2008).

However, the specifications of cultural practices as such are not enough to accurately locate the meaning of literacy (Gee, 2008). According to its more recent meaning, the mere ability to read does not equate with literacy because reading requires certain abilities, background knowledge and various skills to read specific texts in specific ways (Gee, 2008). Reading can also be defined as 'constructing meaning from printed text within a sociocultural context' (Perez, 2011, p.4).

In contrast, the ideological model of literacy places importance on the social world. In this context, Gee suggests that we acquire this skill of reading in social institutions such as schools or social groups (2008), and that social interaction over texts plays a facilitative role for the values, attitudes and beliefs to be communicated, and this cooperation reflects the sociocultural approach to literacy (Gee, 2008). Thus, readers, whether ESL students or otherwise, have acquired how to manage certain texts in specific ways, either through pedagogical input or social interaction. The need to tackle different texts in different ways, the importance of incorporating multiple abilities to read a given text, and the way we learn to read in a specific way, all contribute to make the act of reading not merely a cognitive ability as defined by the old idea of literacy. In contrast, "reading" or "literacy", in a broader sense, is culturally-socially situated (Perez, 2011).

The importance of the social world has been emphasized in the work of L.S. Vygotsky, who founded the sociocultural theory from which the view of literacy as social practice is derived (Perez, 2011). It bears noting that this theory is currently known as the "cultural historical activity theory" (Lantolf and Thorne, 2007, p.197).

Under the umbrella of this theory, literacy is viewed in a sociocultural context as much consideration is given to text, aims, purposes and the context in which the reading or writing occur (Perez, 2011). Thus, reading cannot be separated from its aims, purpose and context. In such a culturally formed setting, it is important to consider the way in which an individual approaches certain texts and how social interaction plays a significant role in that process. Lantolf and Thorne (2007) went further to suggest that without participation in social interaction, development for an individual could not occur. Rogoff (2003) supported this notion. Rogoff (1995) added that, when a sociocultural activity is to be observed, three inseparable concepts need to be taken into account: apprenticeship, guided participation and participatory appropriation.

Apprenticeship refers to the active participation of an individual in the activity, whereas guided participation means the processes of involvement and this can be explicit or implicit (Rogoff, 1995). The final concept; participatory appropriation, refers to the personal change resulting from involvement in an activity. It can therefore be concluded that participation is inseparable from and a condition for an individual's development.

In order for an individual to engage in literate societies, there are a number of required practices known as roles (Luke, Woods & Dooley, 2011). This is also known as the four resources model (Luke et al., 2011). The roles are code breaker, text participant, text user and text analyst (Freebody & Luke, 1990). Code breaker can be taken to mean the practice of word recognition, in which the reader engages with phonological, orthographical and semantic aspects of the text. This requires linguistic knowledge. Text participant is the second role in this model, in which background knowledge is emphasized; this requires the ability to connect the text to the reader's experiences and

knowledge (Luke et al., 2011). There is a clear similarity between these two roles and the bottom-up and top-down models of reading discussed earlier (see 2.2.1). The third role is that of text user. The meaning that Freebody and Luke (1990) gave to that role resembles the stance of considering reading as a social practice; in other words, it means that a reader needs to know how to read certain texts in certain contexts. This skill is acquired through participating with others in sociocultural activities. In addition, the purpose of reading is an important factor that needs to be taken into account. Luke et al. (2011, p.160) added that it requires an 'understanding of institutional dynamics, rituals, constraints and possibilities of text use'. The final role is that of text analyst, referring to the reader's awareness of the writers' dispositions and orientations when they crafted the texts (Freebody & Luke, 1990). This calls for the reader's understanding that 'texts have ideological bases, biases and standpoints' (Luke et al., 2011, p.160) and can be taken to mean the readers' ability to critique and validate different ideas.

Adopting the sociocultural approach to literacy in the present study is justifiable because reading in an academic orientation cannot be confined to interpreting the author's view point in a given text. It is rather a set of practices by which postgraduate students need the skills to recognize words and relate what they read to their experience and background knowledge. In addition, they need the skills required to be text users. At the core of this role is the consideration of the aims of reading and the context in which the reading takes place. As previously argued, literacy is culturally situated; therefore, students acquire the skill of navigating a given text within a specific context of cultural beliefs and values. They are supposed to know and abide by academic

conventions. Academic reading also requires students to analyse texts in the sense that they evaluate and critique what they read.

To conclude, reading in an academic context cannot be viewed as 'an autonomous cognitive practice' (Perez, 2011, p.6) that students can perform in isolation from its context. It is rather seen through a sociocultural lens as a set of practices that requires students to deploy a variety of skills to read.

Therefore, it is a functional, culturally situated social practice (Perez, 2011).

2.3. Differences Between First Language Reading and Second Language Reading

So far, the preceding discussion has shed light on the complexity of reading. It has also considered how reading as a cultural and social practice is viewed. These models or concepts were mainly found in literature concerned with the L1 context with a few additions about L2 reading. Since the context of this study will focus on reading in English as a second language, it is important to identify the differences between reading in the first language and the second language.

These differences can be seen from different perspectives. On the one hand, they can be categorized into linguistic differences, developmental differences, and sociocultural differences (Grabe, 2009; Koda, 2005). On the other hand, it must be considered how reading in L1 and proficiency in L2 help either facilitate or even impinge on reading in L2.

First, there are similarities and differences between the two languages with regard to phonological, orthographical and syntactic features which can play a facilitative or hindering role in reading (Grabe, 2009; Koda, 2005). For instance, students who come from a Chinese or Arabic background exhibit L1 phonological, orthographical and syntactic structures that are entirely different

from those of English and that might lower processing speed. By the same token, students who come from other European backgrounds might be privileged due to the similarities in orthography between their L1 and English. Moreover, the existence of cognates in the students' L1 and English can accelerate reading as it makes the processing easier (Grabe, 2009).

The notion of a possible transfer of many skills from L1 to L2 is valid only if the reader has acquired a specific language proficiency level in L2 (Alderson, 2005; Grabe, 2009; Koda, 2005). This level of linguistic proficiency is known as the "Language Threshold Hypothesis". Although language threshold is not easy to identify (Koda, 2005; Cummins, 1976), L2 knowledge, whether limited or otherwise, affects reading considerably (Koda, 2005).

Another hypothesis, the "Short Circuit Hypothesis", helps to locate the source of difficulty in L2 reading. It indicates that reading problems are related to both reading and language competence. Clarke (1980) found that L1 good readers used poor reading strategies when they confronted difficult reading tasks in L2. This means that they failed to transfer reading skills. This was due to their lack of proficiency in L2. It can be concluded that reading in L2 is not solely affected by L1 reading abilities but also affected by L2 proficiency.

A number of studies have come out in support of the hypothesis that L2 proficiency affects L2 reading (Carrell, 1991; Bernhart & Kamil, 1995; Lee & Schallert, 1997). Nonetheless, these studies have also highlighted the importance of L1 reading ability in affecting L2 reading, thus answering the question that has received considerable attention: to identify if problems are the result of lacking reading skills or L2 linguistic knowledge. While all these studies (Carrell, 1991; Bernhart and Kamil, 1995; Lee & Schallert, 1997) agreed that both factors, namely L1 reading ability and L2 proficiency, had a significant

effect on L2 reading, Carrell (1991) was of the opinion that other factors such as the learner or the learning environment would determine if L2 linguistic ability or L1 reading ability had a greater effect on L2 reading, whereas Lee and Schallert (1997) found that L2 proficiency has a greater contribution in predicting L2 reading ability.

Overall, it can be inferred that L2 reading is not only affected by L1 reading abilities, but that L2 proficiency is also an influencing factor.

2.4. English for Academic Purposes (EAP)

The term “English for academic purposes” is used to refer to the teaching of English to help learners study or conduct research in the English language (Hyland, 2006). What makes it different from general language courses is ‘the focus on specific purposeful uses of language’ (Hyland, 2016:17). It should be broad enough to include different academic practices catering to diversified students’ needs in different contexts. According to Hyland (2006), EAP can cover many types of academic work; for instance, it can cover pre-tertiary education, undergraduate and postgraduate teaching, research genre teaching, classroom interactions, etc. In this sense, EAP is inclusive of a number of different courses, not only for non-native users of English but also for native users of English, to assist them in using certain disciplinary genres in academia (Hyland, 2006).

Different models can be used to view English for academic purposes. There are three overlapping approaches that characterize English for academic purposes (Lea & Street, 2006): the study skills approach, the socialisation model and the academic literacy model. The study skills approach focuses on skills such as formatting, using libraries, and the strategies students need when they read or write (Hyland, 2006). In the socialisation approach, learning is

viewed as acculturation into the academic culture (Lea & Street, 2006; Hyland, 2006), with the focus on preparing students to operate in their disciplines. The third approach is the academic literacy model, in which social institutions pattern literacy practices, and different courses require different skills (Hyland, 2006). Furthermore, learners are assisted to engage not only in understanding but also in critiquing practices (Hyland, 2006).

The third model seems an appropriate model to view EAP for a number of reasons. First, EAP has been criticised for ignoring students' cultures (Hyland & shaw, 2016); in addition, participation is described as a 'novice-expert trajectory' (Lillis & Tuck, 2016). Therefore, adopting this model to view EAP, in which the focus is on students' experiences and the knowledge they bring to academia (Lillis & Tuck, 2016), might help overcome these limitations.

Second, adopting this model means the practices are seen as situated and institutionally patterned; differences in demands within the disciplines are acknowledged. This will help overcome the limitation of EAP practices in which different skills are decontextualized.

Third, the focus in the academic literacy model is on the participants, unlike EAP courses where the focus is on what is being taught (Lillis and Tuck, 2016). The orientation of the academic literacy model is transformative and the academic discourses are characterised by shift and change unlike the assumption that in EAP there are specific conventions, genres and discourses to which students need to be introduced (Lillis & Tuck, 2016).

To sum up, the academic literacy model seems to be a combination of the other two models: the study skills model and the socialisation model. However, the further engagement in academic discourse that it allows participants and the acknowledgement that literacy practices are contextualised,

situated and institutionally patterned make it an appropriate model to conceptualise EAP.

2.5. Academic Reading Practices and Difficulties of International Students

Reading is a key skill in any language, including English. It is an important skill in English that learners need to perform very well (Grabe & Stoller, 2011). In higher education, this claim could be attributed to the role of reading in providing a source of input that facilitates language learning and the acquisition of academic knowledge. Therefore, such an important and effective skill needs to be given attention in order to understand how students read and what can facilitate or negatively impact reading. The review of the past studies in this section will be divided into two parts: academic reading practices and academic reading difficulties.

2.5.1. Academic reading practices.

Regarding academic reading practices, to the best of my knowledge, this is an area that little published research has explored. Before reviewing the existing studies, it is worth noting that all of them except the study by Walker (2013) were conducted in non-ESL contexts.

Different reading habits based on students' proficiency in reading were discussed in the paper by Sheory and Mokhtari (1994). The focus covered students' academic and non-academic reading. Additionally, the context was different in terms of English language status for the participants as English was their first language. Eighty-five students responded to a questionnaire. One salient finding was that the students spent little time reading; regardless of their proficiency, they read slowly and this was seen by them as the main hurdle. Similarly, Mokhtari, Richard and Gardner (2009), with a slight variation in focus,

conducted a study that shed light on the reading habits of college students; they investigated how reading habits are affected by internet use. 539 college students participated in the study. The mean of reading time for academic purposes was only 2.14 hours per day; moreover, the students indicated that they were engaged in other tasks when they read. These two findings showed that the students spent little time reading.

The PhD students involved in a study by Kwan (2009) indicated that they valued the help that they received from their supervisors that came in the form of lists of recommended reading. The researcher presented narratives of the postgraduate students and how they prepared for writing their PhD thesis; to be more specific, they reported how they chose the disciplinary literature.

The only study that has reported on ESL students' experience with reading is a study conducted by Walker (2013). This study investigated reading self-concept taking into account competency in reading, difficulties encountered and affective domain, while comparing higher and lower group of students in competency. Nine students were interviewed, and one hundred and eight students participated in the first wave of a questionnaire; additionally, eighty five students participated in the second wave. The students were studying a course to enable them to join a Masters' programme. With regard to reading habits, it was found that the group with a high level of English and reading competency read extensively whereas the group of students with low English and reading competency read less varied material. This longitudinal study revealed that the improvement in their perception of increased competence in reading was noted and this was associated with amount of reading.

In conclusion, the studies of reading practices that have been reviewed, although conducted in different contexts with students at varying levels, reveal

that there are some areas that need to be investigated, for instance, reading frequency and the amount of reading students do, the process they adopt to approach academic texts, the purposes of reading and the sources they depend on while choosing texts to read for academic purposes. This suggests the need to take into account these dimensions of reading practices while investigating ESL students' academic reading.

2.5.2. Academic reading difficulties of ESL students.

In the literature, a considerable number of studies have investigated the academic experience of students and revealed the various difficulties they encountered (Auerbach & Pakiston, 1997; Berman & Cheng, 2010; Briguglio, 1998; Cheng, 1996; Evans & Morrison, 2010; Hirano, 2014; Li & Chun, 2015; Mckee, 2012; Shen, 2013; Sheory & Mokhtari, 1994; Son & Park, 2014; Terraschke & Wahid, 2011; Weir, Hawkey, Green, Unaldi & Devi, 2009). These studies have confirmed that students encounter numerous difficulties when they read for academic purposes. These difficulties stem from different sources, both linguistic and non-linguistic. The linguistic difficulties include structural and lexical difficulties, whereas the other difficulties of non-linguistic origin can occur according to participants' different situations, for example, the amount of reading they have to do.

These studies will be divided into two groups based on the extent to which they are similar to the present study in terms of the method used to research reading difficulties. I shall start with studies that used qualitative methods since the use of such methods may have allowed researchers to investigate difficulties more deeply.

Different studies have contributed to a description of students' experiences with academic reading. While some studies explored other areas,

for instance EAP programmes, these often included a discussion of reading difficulties, whereas in other studies reading difficulties were the main focus. Hirano's (2014) investigation is an example of studies that have been conducted to explore reading in particular. Hirano conducted a study to determine the challenges of academic reading among a number of undergraduate students during their first year. The study was conducted in an English-speaking country (namely the United States), and the participants were all refugees coming from different linguistic backgrounds. Data include interviews with students and with faculty of the college and classroom observations, and documents of assigned readings, specifically those students had difficulty with, were collected. Hirano found that students face numerous difficulties stemming from different sources. The participants pointed out that their inability to understand vocabulary was the main culprit. Another difficulty of a non-linguistic nature common among participants was the large amount of reading assigned. Additionally, a lack of background knowledge was also emphasized as a source of difficulty. However, at the end of the year, all the students were able to pass successfully, an indication from the researcher's point of view, that they were capable of coping with academic reading difficulties.

This study sample involved refugees from different countries. In terms of the challenges they face, refugees definitely share a number of similarities with EFL/ESL students; nonetheless, there are also some differences. The work of Rumbaunt and Ima carried out some years previously (1988) indicated that refugees' proficiency in their first language has a significant effect on their performance in L2. They may have experienced interrupted schooling and this was shown to have a definite effect on their L1 literacy. In addition, the

psychological pressure they experienced also dramatically affected the process of their learning, whether in higher education or other contexts. However, that did make them truly different from other EFL/ESL students in academic contexts, meaning that all of the considerations discussed thus far did not contribute to making refugees' linguistic needs slightly different from those of EFL/ESL learners. Regarding the results, they were similar to other results with non-refugees ESL students. In his research Hirano indicated that the participants' readiness for college study had not been demonstrated by their performance in the standardized tests. Nonetheless, they were able to finish the first year and graduate from college successfully, thus indicating their abilities to cope with academic reading difficulties.

In a different context to Hirano's (2014), in which academic reading was explored in an English speaking context, Evans and Morrison's (2010) research involved students in a non-English speaking country (Hong Kong). The focus in Evans and Morrison's study was broader than Hirano's as they explored all linguistic challenges. They attempted to track the experience of 28 undergraduate students with an emphasis on the language-related challenges they encounter during their first term at the university. Another group of 3009 students in their first year participated in a survey that also emphasized language-related difficulties. Although data were gathered via the use of interviews with the 28 students in addition to questionnaires, the findings corroborated each other. The survey findings showed that, although students did not think reading was the most difficult skill they had to master, a considerable number of difficulties were reported in relation to it. The most difficult three domains were to read quickly, work out the meaning of difficult words, and finally to understand specialised vocabulary. The notion that

students lack specialist vocabulary knowledge was also corroborated by the interview findings as it was a recurrent theme. Another cause of difficulty as reported by the students was the nature of academic reading texts, as they are dense and complicated. In addition, academic reading demands that students use their research skills to search for suitable texts. Such requirements made their assimilation into university-level study more difficult.

The use of qualitatively-oriented methods lent this research its strength. Unlike the questionnaires, the interviews allowed the participants to express themselves and discuss the difficulties from their own points-of-view. The questionnaire, while it enabled the researchers to generalize the findings, especially with such a large representative number of participants, forced them to choose among certain items. Thus, it did not allow as much range in participants' responses as the interviews.

Reading is one of the macro-skills that receives attention in EAP preparatory courses. These courses aim to familiarize international students who enter programs in English-medium universities with academic conventions in general. In this regard, another study, which is slightly different from the previous two in its focus, investigated the effectiveness of EAP courses. In order to investigate this effectiveness, Wahid and Terraschke (2011) compared the experience of postgraduate students who completed the EAP pre-session course and those who started the program straight away without taking any courses. Wahid and Terraschke's study seems to be indirectly relevant to the present research as the international students reflected on the problematic areas they encountered while they pursued their studies in Australia. The researchers interviewed two groups of students: seven students who completed an EAP course and another 12 students who did not. The study revealed that

international students in an English-medium university face numerous problems in relation to reading. Most importantly, both groups of students experienced the same problems but with varying levels of difficulty. They indicated that they were unable to keep up with the large amounts of assigned reading; the researchers argued that this indicated that the students' reading skill might be deficient. Another recurrent theme reported by the international students was their struggle with unknown words, especially in technical-content texts. They were also unable to accurately process sentences structures. Nonetheless, in this longitudinal study, students in both groups indicated in the final interview that their reading abilities had improved over time; in particular, their reading speed had increased, indicating their efforts to cope with reading difficulties proved fruitful. They attributed their improvement in reading performance to certain strategies adopted to overcome reading difficulties, such as using dictionaries less frequently, repeat reading, guessing the meaning of unknown words, becoming more tolerant towards ambiguous words, producing their own summaries and charts of required readings and using vocabulary lists. Although the implementation of these strategies was apparently present in both groups' responses, the group who had benefited from the EAP course referred most of the gains in their performance to the activities they did and the skills they learned in the course.

Wahid's and Terraschke's (2011) study as indicated above was designed to explore the learning experience of non-English speaking background (NESB) students in an English-medium university yet it was too broad to capture what the potential difficulties were that international students usually face in each area, i.e., writing, reading, listening and speaking.

Another example of a researcher's attempts to gauge the perceptions of NESB students about their linguistic, cultural and educational needs at an English-medium university is a study conducted by Briguglio (1998) at Curtin University in Australia. In this qualitative study, the researcher kept several linguistic needs in mind as the study was not intended to examine reading difficulties in particular. Moreover, although the study was intended to investigate the needs of undergraduate students in their first year of study, the researcher received a request from postgraduate students who thought that they could provide insightful input since they had spent more time at the university.

Before being interviewed, the students, 18 in total, had to fill out a questionnaire and complete a self-rating scale of their proficiency in English. Such a questionnaire was mainly designed to determine the correlation between students' self-rating proficiency in the four macro-skills and the length of stay in Australia with relation to gender as a possible influencing factor. The researcher stated that neither gender nor length of stay in Australia correlated with the students' self-rating proficiency. This finding corroborated other studies, e.g., Weir et al. (2009), who found that first, second or even third year students experienced the same level of difficulties indicating no effect of the length of stay in an English speaking country. Nonetheless, those variables needed to be considered, not only because the study group was drawn from an unrepresentative number of the population (only 18 students) but for the possibility of inaccuracy in the self-ratings the students completed about their proficiency. Although this was noted by the researcher herself, she argued that the ratings of the students' proficiency corresponded with her assessment of participants' speaking and listening skills during interviews. Yet this claim can

be disputed for two reasons: firstly, non-linguistic factors contributed to making the experience of interviews inaccurately reflective of the participant's language proficiency, and secondly, listening and speaking might not necessarily reflect the participant's proficiency in reading and writing.

In principle, the study was qualitative and the interviews with most of the students indicated that they needed help in all four macro skills. Writing and speaking, in particular, were the skills with which they needed most help. Reading did not appear to be the most difficult skill they had to master; however, one student indicated that reading in English is difficult and time-consuming. Difficulties in catching what the lecturers were saying was also noted in the students' responses. It can be argued that this is "listening" but it can indicate students' difficulties in processing and comprehending input, whether spoken as in listening or written as in reading. Another area in which the students required support was how to read specialised texts, thereby providing further evidence that students face difficulties in academic reading. This lead Briguglio to recommend that universities should provide additional English language support and that any activities as such should be publicised within the student community, as the majority of them were unaware of these classes.

As indicated earlier, reading difficulties may emerge in studies in which the focus is not reading difficulties in particular. For instance, and in an innovative approach, Auerbach and Pakiston (1997) conducted a hybridised study that included an intervention reading course and at the same time collected qualitative data from participants. The study aimed to explore the ways through which ESL learners investigated their own reading and use of strategies, and whether or not this resulted in improved performance in reading

comprehension. Twenty undergraduate students from different cultural backgrounds who were also enrolled in an intensive language program participated in the study. Since the students had been trained to use research tools to investigate their reading and analyse their data, the researchers classified the research as participatory, which lent to its uniqueness. This research has yielded rich data about reading in an ESL context, how students read, how they feel about reading, and, most importantly, the particular strategies they use to overcome reading problems. The use of numerous research instruments enabled the researchers to gather rich data. These instruments included a questionnaire to explore students' reading in general, assessment of the students' comprehension abilities and strategies awareness, interviews with think aloud protocol, a reading inventory in which students were asked to reflect on their reading, and a strategy questionnaire at the end of the course. However, there was an issue in the methodology. The use of think aloud protocol to collect data from low proficiency undergraduate students may not have enabled them to express themselves, as was noted by the researchers themselves. As the interviews, together with the think aloud protocol, were conducted twice - before and after the reading course - the researchers noticed that, as a result of many factors, the students were able to articulate their problems clearly. Although the think aloud protocol at the beginning may not have revealed details about the learners' difficulties in reading, it contributed to drawing their attention to the reading process and raising their awareness when reflecting on their choices and application of strategies whilst reading. This added to the overall success of the investigation.

As in other studies, the learners indicated that vocabulary and grammar were the biggest obstacles. As a result of their low proficiency in English, and

lack of reading skills, the students were constrained by sentence-to-sentence understanding instead of trying to find the overall meaning of the passage. Further evidence in this regard was provided by a student who indicated that understanding all the words in the text serves as a prerequisite to understanding the text itself. The students' inability to understand every word demotivated them and catalysed their waning interest. Yet they varied considerably in how they dealt with unknown words; some reported keeping a dictionary on hand to translate words, while others suggested skipping unknown words and guessing the meaning from the context. Among the vocabulary strategies employed was looking up the words after reading.

Another qualitative enquiry was conducted by McKee (2012), in which the focus was slightly different as the researcher attempted to explore students' views about the pre-sessional course they had attended before they started their academic courses at London Metropolitan University. McKee interviewed four students (undergraduate and postgraduate) in their first semester. Reading was a challenge for them all and vocabulary was specifically one of the difficulties they encountered.

The focus of research shifted to the metacognitive knowledge of EFL students' reading in Li and Chun's (2015) study. They explored how undergraduate Chinese students utilize their metacognitive knowledge in reading. The sample involved a group of four students classified as having successful and less successful levels according to their reading score in the final English language exam at the end of their first year at the university. Interviews and think aloud methods were used together with observation. For both groups, vocabulary posed a difficulty, but there were also differences in the strategies used to tackle this difficulty, as some were high-school- system-

oriented and they focused on understanding every word in the text. Others focussed more on attempting to obtain the gist.

The primary research findings in the studies carried out by Hirano (2104), Evans and Morrisons (2010), Wahid and Terraschke (2011), Briguglio (1998), Auerbach and Pakiston (1997), McKee (2012) and Li and Chun (2015) discussed above were approximated in another group of studies that used quantitative methods in investigating reading. Berman and Cheng (2010) conducted a study at a major university in Canada which involved a diverse sample of native speakers of English (NS), as well as non-native speakers (NNS) pursuing studies at undergraduate and graduate levels. The inclusion of these four groups was for comparative purposes with regard to the difficulties they face and whether they affect their academic achievement. The survey findings from 186 students taken from across the four categories indicated that students' perceptions about the academic difficulties in the four areas of language vary according to their English language status. NS students, whether undergraduate or graduate, rated all the four skills fairly equal in terms of their difficulty, whereas the NNS students found speaking the most difficult skill followed by writing. With regard to reading, surprisingly it was considered by both graduate and undergraduate NNS students as the least difficult skill, whereas undergraduate NS students considered it to be the third most difficult task after writing and speaking. Furthermore, the graduate NS students found it to be the most difficult skill. According to the researchers, such differences between these groups was expected as the NNS students were studying in a second language environment and this can be a challenge, especially with the data being collected during their first year of study.

To be more specific, regarding reading subskills, three difficulties were rated higher by undergraduate NS students: understanding writer's attitude and purpose, understanding the academic text, and understanding details of a text. Similarly, undergraduate NNS students found understanding the writer's attitude and purpose difficult; furthermore, they also found understanding research reports difficult. It seems that, to some extent, the difficulties experienced by undergraduate students are similar for both undergraduate NS and NNS students. This was not the case with graduate NS and NNS students. The NS found understanding research reports the most difficult, followed by understanding journal articles and understanding details of a text. On the other hand, NNS found understanding a writer's attitudes and purpose to be the most difficult skill in relation to reading. Different course requirements can be the cause for such differences between undergraduate and graduate students and the English language status and environment may explain the differences between the NS and NNS results. Nonetheless, for this particular result, Berman and Cheng did not give additional explanation for the difference between the two groups.

The study also indicated that, when their performance (GPA) was compared to their NS undergraduate and graduate peers, the NNS undergraduate students performed better than the NNS graduate students. Moreover, the NNS graduate students self-assessed difficulties negatively correlated with their GPA, indicating that the higher GPA they acquired the lower the level of difficulties they thought they encountered and vice versa. These two findings suggest that language-related issues largely impact NNS students at the graduate level and therefore they can be considered an impeding factor against satisfactory academic achievement. This suggests that

the learning experience of graduate NNS is different from that of undergraduate students.

The study showed insightful differentiation between the non-native undergraduate and graduate students. However, the study did not illuminate the differences in difficulties faced at the micro-level of skills because the questionnaire, with its predetermined responses, did not allow these differences to be highlighted. In other words, there may be additional themes for the difficulties between the two groups, but the study method did not make it possible to examine them. This necessitates further investigation of the learning experience of graduate NNS as theirs may be different from that of non-native undergraduate students, using a different method, particularly if the method allows the students the chance to express their difficulties.

As noted before, the academic reading difficulties discussed above are not confined to students for whom English is a foreign or second language; these difficulties are also experienced by some students whose first language is English. In this regard, and in a similar context to the one in which Berman and Cheng conducted their study, Weir et al. (2009) surveyed 766 students for whom English was either an additional language or their first language who were enrolled in either under- or postgraduate programmes in a British university. The study involved different stages. In the preliminary piloting stage, 77 students responded to an open-ended style of questions in a questionnaire investigating academic reading difficulties. This stage, though piloting, lent the study its strength as it approached the problem with open-ended questions allowing participants' perceptions to inspire and afterwards inform the design of their main research method, a questionnaire, and this is likely to have increased the possibility of introducing other reading difficulties. The most highly

rated problem that emerged from the pilot study was reading difficult texts, whether related to theory or concepts. Reading technical language was also found difficult, followed by difficulty in locating required information and being pressured by time to meet heavy reading loads.

In the main questionnaire, an opportunity sample was used resulting in the involvement of 766 students studying at undergraduate or postgraduate level across different disciplines, for whom English was either the first or additional language. The researchers also included some students in their second and even third year to track the changes and for comparative purposes. For students for whom English was the L1 or an Additional Language (EAL), the main sources of difficulties were reading texts with complicated subject matter and finding the time to complete the required reading. Reading long texts, locating the information needed quickly, and a lack of background knowledge were also signposted by both sub-samples of students with English as L1 and as L2. Since the main focus of the present study is the reading difficulties of international students or, as in the study by Weir et al., EAL students, it would be important to identify the reading difficulties these researchers identified.

In addition to the previously mentioned difficulties that were found common to both EL1 and EAL students, 40% of the EAL sub-sample found relating the content of texts to their existing knowledge to be difficult, in addition to taking notes on pieces of information they would need and understanding the text as a whole. Regarding the other sub-samples of the study, i.e. students in their first or second year, the researchers found that they experienced the same difficulties. This allowed the researchers to infer that, for university students, being exposed to academic discourse over a period of time does not necessarily mean that students will not experience the same problems they

faced in their first year of academic study. The study also indicated that the only difference between the postgraduate and undergraduate students was in finding relevant information quickly in a text as it was rated higher by undergraduate students as being difficult. This was highlighted without further differentiation between EL1 and EAL students.

Another point of strength this study has demonstrated is its inclusion of a diverse sample enabling the researchers to investigate the differences between these subgroups. However, it did not show in detail the differences between postgraduate and undergraduate EAL students as it intended to do as its secondary goal was tracking the experience of academic reading as related to students' performance within the International English Language Testing System (IELTS), particularly in the reading module. This will be revisited in the following section which discusses IELTS.

Berman and Cheng (2001) and Weir et al. (2009) found that reading posed difficulties not only for ESL students in higher education but also for students for whom English is the first language. Sheory and Mokhtari (1994) examined the reading (academic and non-academic) habits of undergraduate students at a university in the U.S. Eighty-five students participated in a questionnaire. The data was analysed with the students' proficiency in a reading test in mind. Regardless of their proficiency, the main hurdle was that they read slowly. Their second problem was an inability to understand what they read. Vocabulary was another difficulty they experienced and low proficiency students gave it more importance, indicating that there were differences between students with high and low proficiency in reading in terms of how they view their reading.

In another quantitative study that aimed to identify the skills most required by students to enable them to read, Cheng (1996) used a questionnaire with a group of 63 postgraduate ESL students at Reading University to investigate their reading. It was found that they needed the skimming skill, the skill of extracting relevant information for assignments and dissertation, and understanding unknown words.

Shen (2013) examined students' academic reading difficulties and strategies in a technical university in China. A group of 106 EFL undergraduate students from two different majors responded to a questionnaire with open-ended questions. Subsequently, in-depth interviews were conducted with ten students. Results showed that 94% of participants attributed difficulty in reading to vocabulary. Some had gone further to indicate their inability to understand a passage even if they had a dictionary. They also flagged the lack of background knowledge and their inability to understand a text because of the multiple meanings that some texts denoted. The researcher differentiated between the two groups of participants as the English language major students were more conscious of their reading difficulties than the engineering students. Even with regard to strategies use, they were different: the English major participants read the text and underlined unknown words whereas the engineering group immediately looked up the words in the dictionary. Over all, the English major students depended on reading strategies unlike the engineering students, who asked for help if they needed it. Other strategies employed included note-taking, guessing the meaning of unknown words, reading a Chinese version of the text and asking for help from peers and teachers.

With regard to this study methodology, it is worth noting that the data collection methods (questionnaire and interviews) were in the students' first

language, that is Chinese. As the study was conducted in one of the technical universities, where students are classified as less proficient than students in other universities, the use of the students' first language is a point of strength of this study, as it minimises the effects of low language proficiency on responses.

In an investigation of issues faced by non-English-speaking background students at an Australian University, Son and Park (2014) explored the factors that affect the students' academic experience. Seven international PhD students participated in group discussion and interviews. One student indicated that it took him days to comprehend one article, indicating how difficult reading was to him. Critical reading was considered to be an important skill for success.

Keeping in mind the previously mentioned findings, ESL students seem to encounter several difficulties when reading for academic purposes. Most of the aforementioned studies found that students' lack of vocabulary knowledge made reading more challenging as it impacted negatively upon students' understanding of the required reading content. Students' adaptations to accommodate these difficulties were also reported: they made certain efforts to improve their reading abilities, such as using a dictionary to look up unknown words or guessing the meaning of unknown words, using special vocabulary lists, depending on their peers to clarify written texts for them, and looking up words after they had finished reading.

In addition, students have reported that the nature of some courses requires certain background knowledge needed to comprehend written texts. Therefore, the context in which reading material is located is of paramount importance to help students understand it properly. Students have reported that they would not be able to cope with reading texts that are considered a cultural

burden without their professors' help in establishing context or background (Hirano, 2014).

Another considerable difficulty is the massive amount of weekly reading required of students at university; it causes them to become frustrated and unable to perform comfortably. As a result, students also have reported they find reading difficult and time-consuming. This response most likely refers to the students' inability to process and comprehend texts in a reasonable time, thus indicating a difficulty in comprehending written texts. However, students have implemented numerous strategies to read selectively, including skimming and reading according to the study guide or lecture slides, in order to manage to read the required texts.

In conclusion, the research discussed in this chapter has involved ESL students in different contexts, and all the studies identified potential sources of difficulties for students when reading for academic purposes. A limited number of studies involved postgraduate students (Wahid & Terraschke, 2011; Briguglio, 1998; Weir et al., 2009; Berman & Cheng, 2001; Son & Park, 2014; Mckee, 2012; Cheng, 1995). Based on the studies reviewed, the postgraduate experience may be different from that of undergraduates. Investigating these difficulties from students' perspectives is likely to help inform subsequent policies and decisions and can further help inspire ESL learners to adopt different strategies to overcome reading challenges; hence, the importance of identifying the challenges related to academic reading that are typically experienced by ESL postgraduate students at one of the UK universities, particularly in their first year. It is also necessary to pinpoint how these culturally diverse students manage to cope with academic reading difficulties in an English-speaking country.

2.6. Entry Requirements of English Language Proficiency at the Universities

International students establish their capacity to meet the entry requirements of English language proficiency by completing specific standardised English language tests, the most popular of which are the International English Language Testing System (IELTS) and the Test of English as a Foreign Language (TOEFL) (Dooey & Oliver, 2002). This current study will focus primarily on the IELTS test, due to this being the most frequently employed test in academic institutions in the United Kingdom.

English language proficiency requirements vary between universities in the UK and in other English speaking countries. Furthermore, they vary in the one institution from one discipline to another, i.e. some courses are perceived to be linguistically demanding, requiring a high level of proficiency, whereas others accept lower levels (Woodrow, 2006). For instance, in the university involved in this study a research degree in Classics and Ancient History requires an overall score of 7 in IELTS with a minimum score of 6.5 in writing and in all other skills no less than 6 (Postgraduate Research Entry Requirements, 2018). This subject is clearly considered linguistically demanding compared with Engineering, in which the entry requirement of English proficiency is lowered to a 6 overall score in IELTS and no less than 6 in all skills (Postgraduate Research Entry Requirements, 2018). However, such linguistic requirements are negotiable, with applicants with lower band scores being accepted on condition that they enrol in an intensive language summer course, known as a pre-sessional course (English Language Requirements, 2018).

2.7. English Language Proficiency and Academic Performance

Language proficiency can undoubtedly prove a crucial factor in the academic performance of international students. This is suggested by the findings of a study conducted by Weir et al. (2009). In that study, the relationship between participants' English language proficiency as measured by IELTS, particularly IELTS reading module scores, and the perceived academic reading difficulties was investigated at a UK university. Although their study involved both native English speakers and students for whom English was an additional language, such a relationship was explored only for the non-native English speakers, and during their first or second year of study at either under- or postgraduate level. Data was obtained from 301 students, with the survey analysis identifying significant differences between a higher group (students scoring 6.5 and above in IELTS reading), a middle group (students scoring 6), and a lower group (those who scored 5.5 or less) of IELTS test scores in relation to their perceived problems experienced in the reading tasks they were required to undertake. This can be used to infer the importance of English language proficiency and how it affects students' academic experience, as significant differences were found between these test takers.

In the same vein, other studies concluded that international students' low proficiency resulted in them being unable to produce work at an appropriate academic standards. Bretag (2007) identifies the concerns of academics concerning the low language proficiency of international students, including attributing the plagiarism found in some students' work to their lack of linguistic proficiency. Furthermore, concerns regarding academic integrity have also been raised as a result of practices preventing international students from being penalised when they are unable to meet academic standards, resulting in a

general lowering of higher educational standards (Bretag, 2007). This explains how far students' low proficiency impacts on their academic performance. However, this may not be the case in every university as there is a variance in university policies concerning methods of assessing students' work, along with issues relating to plagiarism.

Elder, Bright and Bennett (2007) point out the significance of the methods employed by each institution to judge students' work, as such methods indicate whether language proficiency plays a central, or peripheral, role. They support this argument with the results of their study concerning international students' linguistic proficiency in New Zealand. The faculty members in their study believed that content was the most important feature of students' academic work. When it came to writing (i.e. the skill on which students' academic performance is generally judged) they placed considerable emphasis on the content of essays, rather than effective organisation and use of grammar. The researchers gave a number of general reasons for low proficiency students being able to succeed. Firstly, this could be attributed to some faculty members who fail to conform to university standards while assessing students' essays and, secondly, it can be attributed to the awareness of the students themselves of their own shortcomings, leading to an attempt to compensate by improving their linguistic abilities. Thus, institutions apply divergent policies and hold differing views concerning the linguistic proficiency of international students. As indicated earlier, Bretag's (2007) study has identified that faculty members in ten universities in Australia felt pressured by university policies to pass low proficiency students, whereas in New Zealand, students with low proficiency may pass due to practical, political or ethical reasons.

Academic experience is a complex concept, capable of being influenced by a large number of factors, of which English language proficiency is the central aspect. This needs to be seen while keeping in mind that linguistic proficiency can affect students' experience at the university but it is not the only factor. Brindley and Ross (2001) state that language proficiency cannot be viewed as the single most important factor, due to success at higher education level revealing a weak relationship with test scores in relation to language proficiency. This is supported by Lloyd-Jones, Neame, and Medaney (2007), who established that a proportion of the participants in their study who were required to resubmit their theses were not asked to do so as a result of any lack of language proficiency but rather as a result of other non-linguistic factors that significantly influenced their academic performance, e.g. motivation, sociocultural context. Dooley and Oliver (2002) also noted further evidence indicating the complexity of academic performance, establishing that success or failure in higher education is not only attributed to language proficiency. Their sample included a number of native speakers who failed to achieve the marks necessary for a pass, despite their high IELTS score. Cotton and Conrow (1998) also identify further evidence in support of this issue, discovering other variables with the potential to impinge upon academic performance and success, including the language assistance students receive, motivation, cultural adjustment and welfare difficulties. These factors were verified to be influential, alongside the issue of cultural background (Feast, 2002). Other studies have highlighted the influence of prior education (i.e. in school) (Arrigoni & Clark, 2015). The prior education was also found as a mediating factor along with some other factors in the study conducted by Stephen, Welman & Jordan (2004). The study was conducted in South Africa (where there is an issue

concerning the English language proficiency of black and Indian students in higher education), further factors include family circumstances, parents' education, level of urbanisation and exposure to the media. Further evidence has also found that English language proficiency impacts on students' performance in conjunction with cultural, social and economic factors (Elder et al., 2007).

When it comes to non-linguistic factors, Bayliss and Ingram (2007) have emphasised the influence of personality, e.g. self-confidence. In addition, differences in the cultural codes and practices of the students from those of the countries in which they study can also play an important role, resulting in difficulties adjusting to the new academic culture. At the same time, academic success is linked to students' attitudes towards learning, and the efforts they incorporate on acculturation into the culture of the institution (Sharkey & Layzer, 2000). Further study has argued that international students are under pressure, due to living in a different culture, thus justifying the importance of social adjustment to the new culture (Kerstjens & Nery, 2000).

Thus, the academic experience of students is complex, with different influences, both of a linguistic and non-linguistic nature. Language proficiency is only one of several factors influencing academic experience; nonetheless, it is one of those factors that could be controlled to enable international students to operate successfully within an academic context. This can be done in a number of ways by higher education institutions, including (1) the introduction of sustained linguistic support (Briguglio, 2011; Xu, 1991); raising international students' awareness concerning academic conventions and ways of communicating within a specific cultural context (Briguglio, 2011) and (2)

tightening screening strategies by increasing English language entry requirements (Xu, 1991).

Moreover, in line with how literacy is viewed in this study, the consideration of students' linguistic ability is not the whole matter at hand. The acknowledgement of social and cultural influence is also of high importance as this can contribute to shaping students' academic experience.

To conclude, studies that established the importance of English language proficiency through a medium level of correlational relationship with students' performance, and those that established opposing findings, are alike in acknowledging English language proficiency to be of critical importance to students' academic performance (albeit in combination with non-linguistic factors impacting on the academic performance of international students). In the light of the mixed results that these studies established in relation to the importance of English language proficiency (as measured in IELTS), there is a need for further investigation in order to understand the relationship between the students' English language proficiency and their perceived difficulties with academic reading.

Chapter 3: Methodology

This section discusses the methodological decisions made for the present study to help answer the research questions. First, a paradigmatic stance for the mixed methods approach is offered. Second, the rationale for mixed methods research is explained. Third, the research design and methodology, namely an exploratory sequential design, are explained and the advantages of the use of mixed methods design are discussed. Through the use of this sequential design, a qualitative longitudinal approach is employed for the first phase; for the second, a survey methodology is used. Consequently, the think aloud protocol and web survey methods are discussed for the two phases, respectively. Third, sampling techniques for each phase, followed by an explanation of the data collection procedures and analytical procedures are presented. As the study involves mixed methods, a discussion of the importance of data integration is introduced. Ethical issues that were taken into account are also examined. The final section sheds light on the researcher's relationship with the participants.

3.1. Philosophical Stance

This mixed methods study adopted the pragmatic perspective. According to pragmatism, the dichotomy that exists between the paradigms is false (Onwuegbuzie & Leech, 2007). This makes pragmatism flexible as it can 'accommodate other philosophical positions' (Ormerod, 2006, p.907), and the two strands of data can be used to explain each other (Onwuegbuzie & Leech, 2005). As a result, pragmatic researchers can integrate methods in one study (Onwuegbuzie & Leech, 2007). The integration of multiple methods enables

researchers to gain different perspectives of study focus and view a particular phenomenon better (Biesta, 2003; Mingers (2001).

Another appealing characteristic of pragmatism is that it does not propose the use of a specific method (Hathcoat & Meixner, 2015; Creswell, 2014). Rather, research questions are given priority (Hathcoat & Meixner, 2015; Biesta, 2010) and they should determine the method (Onwuegbuzie & Leech, 2005).

In response to demands of research questions of this study, the qualitative and quantitative methods were used to provide a clearer picture of ESL academic reading. The following section will further explain the rationale for mixed methods research.

3.2. Why Mixed Methods Research?

It is worth noting that the use of qualitative and quantitative data enabled the researcher to investigate the study focus through an in-depth longitudinal approach involving the collection of qualitative data – whilst also acknowledging the potential to do so through surveying a larger number of students to offer a more generalizable understanding of the academic reading difficulties ESL postgraduate students encounter. This is the main strength of this study, as this enabled me to identify in detail various reading practices and problematic areas from the perspective of a specific group of ESL postgraduate students at the same time as enabling me to identify whether or not these reading difficulties are experienced by a larger number of ESL postgraduate students. In addition, a wider range of research questions can be answered via the implementation of such an approach (Johnson & Onwuegbuzie, 2004). For instance, if the research was merely qualitatively driven, investigating the correlation between academic reading difficulties and students' English language proficiency (as

measured in IELTS) would not be possible. In addition, the research is not confined to one method, meaning that the weaknesses of one method can be overcome through the use of another (Johnson & Onwuegbuzie, 2004). In other words, numbers derived from quantitative methods add precision to words unearthed by qualitative methods; hence, these words can also explain the numbers in detail. Therefore, combining the two approaches within one study minimises the weaknesses of each and permits the researcher to utilise their strengths at the same time (Onwuegbuzie & Johnson, 2006). In the first phase, think aloud protocols (concurrent and retrospective) were used together with semi-structured interviews. The concurrent think aloud protocol helped overcome the shortcoming of memory failure to verbalise difficulties that might result by merely using one kind of think aloud protocol, namely the retrospective one. Furthermore, while the use of think aloud protocol enabled participants to reflect on the difficulties they encountered when they read the texts handed to them, the semi-structured interviews gave participants an opportunity to reflect on other difficulties they had encountered in the past. As these methods cannot be used with a large number of participants, the web survey was employed to investigate a larger group.

Moreover, there are two features of the sequential design that adds to its viability. First, the straightforward nature of this design makes it easier to implement and report, as the two stages are separate (Creswell & Plano Clark, 2011). Second, such a design enables the researcher to discover any areas of divergence between the two strands of data (Plano Clark, Garrett & Leslie-Pelecky, 2010).

3.3. Research Design and Methodology

Research design is a key element of any study, as it dominates other research procedures for collecting, analysing and reporting data (Creswell & Plano Clark, 2011). Although this is true for all kinds of research, it is of high importance in mixed methods practice, such as the present study, as it explains how the two strands of data relate to each other (Creswell & Plano Clark, 2011). Given the importance of the research design, it is essential to decide on which one the researcher will implement according to what best addresses the research questions. This study aims to answer several questions in two phases.

First phase questions:

- What are the academic reading practices of ESL postgraduate students?
- How do ESL postgraduate students perceive their English language proficiency?
- What are the difficulties that ESL postgraduate students encounter while they read for academic purposes? How do they cope with these difficulties?
- What changes over time in students' perceptions of English language proficiency, academic reading practices and difficulties can be found?

Second Phase Questions:

- In a wider community of ESL postgraduate students at the same University, how do they perceive their English language proficiency?

- In a wider community of ESL postgraduate students at the same University, what are the difficulties they encounter while they read for academic purposes? How do they cope with these difficulties?
- What is the relationship between international students' English language proficiency as measured by IELTS and their total perceived level of academic reading difficulties?
- To what extent do the survey data confirm the findings in the first phase related to students' perceptions of their English language proficiency, academic reading difficulties and the strategies they apply to cope with them?

The main criterion for selecting research design is the extent to which the study will add to knowledge (Lunenburg & Irby, 2008). As the literature on reading difficulties in the academic context for postgraduate students is still limited, it was decided that the exploratory sequential design of mixed methods would be best, as it is commonly applied in research areas that are less covered (Creswell & Plano Clark, 2011). It is also known as a quantitative follow-up design (Creswell & Plano Clark, 2011): building on the qualitative data generated in the first phase, another method is designed to test a correlation hypothesis and generalise the findings in the second phase (Creswell & Plano Clark, 2011).

The rationale for using this design is based on development. Following this design, I started collecting and analysing qualitative data through the use of a think aloud protocol and semi-structured interviews. This enabled me to understand how ESL postgraduate students read and what difficulties they face, and to identify the strategies they implement to overcome these difficulties. It also enabled me to understand the changes over time in their perceptions of

academic reading difficulties. Building on the students' responses in the first phase, survey items to collect quantitative data about academic reading difficulties in a larger sample were written. Using the first phase data not only helps understand the problem more deeply but also helps in making the wording of the survey items more precise and comprehensive (Creswell & Plano Clark, 2011).

3.4. Research Methodological Approaches

The first phase of the research was qualitatively driven. An investigative approach—namely, a qualitative longitudinal approach—was considered most suitable for the study of such a complex phenomenon. A longitudinal approach was chosen for this phase of research for one reason, a point of strength of qualitative longitudinal research, in that it allows the researcher to illuminate a change (Bryman: 2012) as the data is collected in at least two waves (Bryman: 2012). This feature of a longitudinal approach enabled me to capture the changes over time in ESL students' perceptions about their English language proficiency, academic reading practices and the difficulties that they encountered while they read for academic purposes. To bring a better understanding of academic reading, the study in this phase used multiple methods: the think aloud protocol (concurrent and retrospective) was employed to identify academic reading difficulties; acknowledging the limitations of the concurrent think aloud protocol, retrospective reports were also used later to obtain better insights into these academic reading difficulties and the strategies used to overcome them; in addition, semi-structured interviews were utilised to illuminate students' perceptions about academic reading. In this way, the drawbacks to the think aloud protocol (concurrent and retrospective)(See pages 98-102) were compensated for by the use of another method, namely semi-

structured interviews, which did not suffer from the same points of weakness in the sense that they did not focus on specific instances of reading and therefore they enabled me to capture other dimensions of students' reading. So, a rich description of academic reading was developed, enabling me to generate supporting explanations of how ESL students practise academic reading, develop their reading skills and cope with the particular reading difficulties they encounter and how they change over time.

Nonetheless, due to the nature of the approach in which the data is collected in many waves, sample attrition is an issue, particularly if those who do not complete all the waves of data collection differ in some characteristics from the others who completed all the waves (Bryman, 2012). This was exactly what happened in this study when one of the participants in the first round of data collection did not respond to reminders for the second meeting. Her case was special as she scored the lowest in the IELTS reading module among the participants of the first phase and I was particularly keen to see how she coped with academic reading difficulties and whether she had noticed some change.

The main reason for the second phase was to collect surface but broad-level data. This involved gathering information in a systematic way from participants, in order to help construct quantitative descriptors of the study population (Groves et al., 2011). Thus, it is clear that the interest is in 'aggregates' rather than individuals (Saris & Gallhofer, 2007, p.2). Under this methodology, various designs can be implemented, such as descriptive and correlational research designs (Saris & Gallhofer, 2007). The former refers to the description of the phenomenon, namely, what it looks like from the perspective of the participants; sometimes it is used as a synonym for survey

research (Lunenburg & Irby, 2008). Although it constitutes the elementary level of quantitative research, this does not mean that it is unworthy, as the descriptive research works as an 'impetus' for other educational research (Lunenburg & Irby, 2008, p.28). This is important, as it provides basic information about the phenomenon. The other major division is correlational research. As its name suggests, it highlights the relationship between the variables, as an interaction between them is assumed to exist (Lunenburg & Irby, 2008). The current study, in its second stage, is considered both a descriptive and correlational survey. This classification stems from the research questions, which are always dominant over other components of research. It is descriptive, since it focuses on the description of respondents' perceptions about their English language proficiency, the academic reading difficulties, and the compensatory actions they implemented to cope with difficulties and the resources they either had used or were willing to find in the university.

Through correlational investigation, this study attempted to investigate the relationship between the total perceived level of academic reading difficulties and the students' English language proficiency (as measured in IELTS both overall and reading module scores). Therefore, not only were insights gained, which provided basic information about the academic reading difficulties and the strategies used to overcome them, but also the association between students' English language proficiency and their perceptions of academic reading difficulties was investigated.

3.5. Research Methods

3.5.1. First phase.

Think aloud protocol.

In order to investigate holistically postgraduate student difficulties whilst reading academically, the think aloud protocol (concurrent), along with retrospective reports, were used to collect data for the first phase with another complementary method. There were other considerations according to which of these two variations of verbal reports – concurrent and retrospective –were chosen. In this section, the rationale for using them both is discussed.

The think aloud protocol is ‘readers’ verbal self-reports about their thinking processes’ (Wade, 1990, p.442). With this method, participants are asked to ‘say aloud thoughts running through their heads while composing a text or while reading a text provided by the researcher’ (Rankin, 1998, p.120). The two variations of verbal reports are concurrent and retrospective; according to the first, participants have to read and report at the same time, whereas the second refers to voicing thinking after performing the task (Afflerbach & Johnston, 1984).

Although these reports can be used to obtain information about reader comprehension and reading strategies to facilitate comprehension, they can also be used to detect problematic areas of performance in a given reading task. In this study, the participants were given specific texts and they were asked to read and voice out loud their thoughts about the texts, highlighting the difficulties they faced.

This method is a non-directive open-ended style of data collection (McKeown & Gentilucci, 2007). This particular feature enabled the participants in this study to practise actual reading, experience difficulties and verbalise them freely as they experienced them. This is unlike other methods in which participants' reflection on past reading experience are sometimes confined to choosing inaccurate responses or limited to discussing difficulties in a specific area.

As a data collection method, concurrent reporting possesses other advantages besides the deeper understanding of reading processes provided through revealing the cognitive and metacognitive strategies that readers implement while they read (Klingner, 2004). First, in comparison to other methods used in this study such as interviews and retrospective think aloud protocols, concurrent reporting can minimise memory failure in reporting processes, thereby enabling insightful reports to be obtained (Wade, 1990). While there are two variations of verbal reports used in this study, concurrent and retrospective, the former enabled students to read and verbalise the academic reading problems they encounter and how they deal with them. As these processes were carried out at the same time, permitting no long period of time between the real experience and the report, this lessens the chance of forgetting the process or a thought the reader wanted to flag up. Second, it helps clarify the less well trodden areas in reading research involving the affective domain (Koda, 2005). This means that, by using the think aloud protocol, the reader's response to the text and his/her interaction with it can be captured (Koda, 2005; Klingner, 2004). The flexibility of this method, through which participants can say whatever they think about the text, allows areas such

as how they feel to be discussed. Hence, this attests to the importance of the texts researchers use in the session.

As with any other data collection method, the think aloud protocol has limitations and shortcomings. As verbalising one's thoughts while reading may be novel to participants, this requires practice of the think aloud protocol to familiarise participants with the process prior to the data collection phase (Afflerbach & Johnson, 1984; Klingner, 2004). Although there are variations in training participants to verbalise their thoughts, whether directly by modelling the think aloud protocol or, indirectly, simply by asking them to think about reading processes and strategies, the researcher chose to train them individually in an attempt to draw their attention towards how they process reading and to report this processing at the same time. This training or warm-up activity should not last for more than 15 minutes, as most people need only a few minutes to get used to verbalising their thoughts (Van Someren, Barnard & Sandberg, 1994). Crucial as this stage is, practice might produce biased responses from participants, as training sessions may provide hints or clues on strategies to report (Afflerbach & Johnson, 1984), and this could result in invalid reports about academic difficulties being created.

Another considerable criticism of the think aloud protocol is that it may also produce invalid accounts of reading processes, due to the disturbance it causes to the thinking process (Van Someren et al., 1994; Wade, 1990; Klingner, 2004). To be more specific, invalid reports in this case may be created due to problems in memory. If, for instance, a participant wants to discuss a complicated notion, then verbalising this notion takes time and space in working

memory and it produces another cognitive process that can disturb the reporting of the original process (Van Someren et al., 1994).

Another weakness is that it can produce an incomplete account of what the participant is thinking (Goh & Hashim, 2006). This can be attributed to the low language proficiency of some participants in discussing all the reading difficulties they encounter (Auerbach & Baxton, 1997; Koda, 2005). Indeed, as all methods can produce incomplete information, and in order to overcome these limitations, it is recommended that the researcher uses other measures (Klingner, 2004). It can be combined with other variations of the same style, such as retrospection or prompting and questioning, or it can be complemented by using another method of a different nature to validate the reports. In this study, another variation of the think aloud protocol was used, namely retrospective reports. In retrospection, participants are asked afterwards about their thoughts and the processes they have performed, so they try to remember what they thought about (Van Someren et al., 1994). In addition, semi-structured interviews were used to investigate academic reading difficulties: participants responded to an interview schedule, reflecting on their experience with academic reading as a whole and specifically discussing the difficulties they faced when they read the think-aloud protocol text.

Think aloud has been used innovatively for various purposes in reading research. It is employed to check students' comprehension. In the study conducted by Wade (1990), it was also used to raise ESL learners' awareness and level of criticality about their reading and how that affected their performance in reading comprehension (Auerbach & Paxton, 1997). It was also used to check the students' interest in reading texts (Wade et al., 1999). With

regard to investigating academic reading difficulties, it has also been utilised to investigate those that EFL undergraduate students encounter (Alsubaie, 2014). In this study, think aloud protocol was used to investigate the academic reading of ESL students at postgraduate level.

Selected resources of reading for the think aloud protocol.

The acknowledged importance of the text choice in the think aloud protocol can be considered a limitation, as it can greatly affect the participants' responses and, subsequently, the study findings. By way of example, some texts may not evoke strategies (Wade, 1990). Therefore, the reading text used in the think aloud protocol should not be too easy but should represent a level of challenge to the reader's ability (Koda, 2005; Klingner, 2004). Given that metacognitive abilities are active when the text is hard (Koda, 2005), and in line with the main purpose of this phase of the study, namely investigating academic reading difficulties, it would seem appropriate for the text chosen to be challenging in the hope of eliciting more reading difficulties and the strategies students use to cope with them. However, the two reading texts that were used in the first and second rounds of data collection of the first phase were selected to match one criterion: they should represent what is expected from postgraduate students in their academic reading contexts without aiming to use difficult texts in particular. In other words, they were selected according to participants' respective disciplines. Two reasons were behind using this criterion for text selection: first, this allowed the observation of students' reports to be more naturalistic, and, second, it was important to keep in mind that the participants' proficiency in English was a key factor in the text selection process because too difficult a text might have caused comprehension to terminate through participants becoming demotivated to complete the reading, resulting in

incomplete verbal reports. Therefore, to ensure that the texts were at appropriate level for the students, they were selected to resembled what they were supposed to read for their studies. I assume that the reading lists that were available for postgraduate students in their academic programme web pages were selected carefully to suit the level of postgraduate students. Texts were selected from these suggested reading lists if available. In some cases, when reading lists were not available, texts were selected from journals that publish articles in the same area of participants in the hope that it suits their level.

Since data collection of the first phase was done in two rounds, there was a need to use two different texts for the think aloud protocol of each participant. In order to ensure that the two texts used in round 1 and round 2 were of comparable level of difficulty, they were selected either from the same reading lists suggested in the University website of participants' academic programmes, or they were selected from the same journals or books.

Another important factor related to text selection is text familiarity, which can have a profound effect on participants' performance and may produce biased responses (Afflerbach & Johnson, 1984). Unfortunately, it was difficult to control this, as participants were studying in different programmes; however, a practical step in overcoming this problem was to prepare two reading texts (in case one of them was familiar to the participant) to obviate the text familiarity effect on participants' performance. Fortunately, no one reported that the reading text was familiar to him/her.

Since I wanted the reading experience to be more contextualised, I decided to use discipline-related texts. I emailed those students who expressed

their interest in participating and asked about their majors before we met. I consulted the suggested reading lists that were available on the academic programme web pages for each participant. For students from the Masters in Technology, Creativity and Thinking, for example, it was easy to find suggested reading lists and to choose articles or books from them. Unfortunately, this was not the case across all programmes and I decided to find some journals in the related areas. (See Appendix 1 for full details concerning the articles or book chapters used).

Semi-structured interviews.

In addition to the think aloud protocol that was used in the first phase, semi-structured interviews were employed. Interview is a flexible process in which the interviewer asks questions from an interview guide and the interviewees differ in the way they respond to the questions (Bryman, 2012). Interview was chosen as a complementary tool for many reasons. First, interviews help 'portray ongoing social processes' (Rubin & Rubin, 2011, p. 4). Through the detailed accounts of academic reading practices and difficulties, the interviews helped me understand what ESL students mean when they discuss different aspects of academic reading. Second, interviews, in general, are considered a good choice if the participants' perceptions are to be explored (Punch & Oancea, 2014). Therefore, the decision to use semi-structured interviews was in line with the purpose of the first phase of the study as it aimed to explore ESL students' perceptions about English language proficiency and academic reading. Third, retrospective interviews can capture changes when repeated across time (Rubin & Rubin, 2011). As the first phase aimed at tracing changes over time in students' perceptions about their English language

proficiency, reading practices and difficulties, students were able to reflect on the changes they noticed in these regards.

Interview schedule design.

The interview schedule went through many stages until it arrived at its final form. First, taking into account the literature reviewed and the research questions that the first phase attempted to answer, an interview schedule was drafted (See Appendix no:2). Some changes were made based on a reviewer's feedback after I pilot-tested it with four ESL students pursuing postgraduate studies in the Graduate School of Education in the academic year 2015/2016 (See Appendix no:3 for the schedule in its final form). The interview schedule in the first round was the same for all participants. It was divided into three main parts: the first part asked about demographic detail such as the subject area and IELTS scores; the second part related to students' perceptions of their English language proficiency, how they perceived academic reading and what their reading practices were; the final section asked about students' perceptions of the academic reading difficulties they encountered and how they coped with them.

The interview questions acted as general lines that the interviews followed; however, through the flexibility of the interview as a tool, each interview was unique in the sense that it progressed differently, depending on how each participant responded and whether he/she extended his/her answers.

In the second round, the interview schedule was not the same for all participants. As the aim of the second round was to trace changes in students' perceptions about their English language proficiency, academic reading practices and difficulties, every interview schedule was written according to the

participant's responses in the first round of interviews. (See Appendix no: 4 for an example of these schedules.) Each schedule contained three main parts: the first covered demographic details that had not been asked in the first round; the second part asked about the English language proficiency and students' perceptions about academic reading; the last section related to what participants found difficult in the first interviews.

3.5.2. Second phase

The survey.

For the second stage of the study, web surveys were employed as a method of obtaining data from participants about their academic reading difficulties, the strategies they usually used to overcome these, resources and their perceptions about their English language proficiency. Also, they were also used to investigate the correlation between the IELTS score (both overall and reading module scores) and the total perceived level of difficulties.

Of the different format of surveys, it was decided to use a computer assisted data collection method, that is, a web survey. This decision was based on various appealing features this survey format generally enjoys over other formats. First, as compared to other formats, it is less expensive (Andres, 2012; Callegaro, Manfreda & Vehovar, 2015). The speed of data collection is another advantage (Andres, 2012; Callegaro et al., 2015). This made it more convenient for the current study, as it helped me to overcome the consequences of time delays that are inherent in the nature of the study, as it adopted a sequential mixed methods design. The use of web surveys to collect data for the second stage came after a considerable time had already been spent in collecting and analysing data from the first stage. Time was also saved through the use of this

format, as it did not require data entry since responses were automatically entered and exported as an SPSS file. This also means that human errors in data entry are eliminated (Andres, 2012; Callegaro et al., 2015). Third, participants can complete the questionnaire at their own pace (Andres, 2012; Callegaro et al., 2015). This self-administered feature encouraged the participants to take part in the survey, making it more convenient for them than any other approach (Callegaro et al., 2015). It allowed time to seek out records and check official documents if they wanted to while completing the survey, resulting in more accurate responses (Callegaro et al., 2015). This was of particular significance in this study, as the students' scores in the IELTS (overall and reading module score) were required to run a correlational test. This increased the quality of the details obtained, as the students had the chance to refer back to the documents and complete these details. Fourth, web surveys are flexible with regard to time and geographic dimensions (Callegaro, Manfreda & Vehovar, 2015). In this study, this particular feature enabled students to complete the survey at different times and in different places.

Nonetheless, using a web survey as a mode for data collection was not an easy task but posed several challenges and the shortcomings of a web survey are worth the researcher's consideration. First, a web survey looks different on various browsers and this necessitates piloting the method on the most popular browsers (Andres, 2012). Hence, this study instrument was piloted on the browsers it was believed the students would most likely use (Internet Explorer, Apple Safari, Google Chrome) to check the survey and ensure that the layout remained the same. For the same reason and to ensure that the orientation of the survey was the same whether the respondents used mobile phone or their computers, the survey appearance was checked in both.

Second, questions in the questionnaire can be interpreted differently (Saris & Gallhofer, 2007), particularly in light of the researcher not being present while students completed the survey. Thus, I made it very clear what was being asked and ensured that all survey items were transparent. Third, web surveys are self-administered and this means that probing cannot be used by the researcher to motivate students (Callegaro et al., 2015). Furthermore, this can reduce the response rate (Callegaro et al., 2015).

However, I believe that the advantages of web surveys outweigh the disadvantages and therefore it was decided to use it together with the Qualtrics platform for that purpose.

Survey design.

Different steps were taken before the survey reached its final design (See Appendix no: 5). First, after I reviewed the related literature, I decided to include several survey items drawn from these resources, namely items related to demographic details and two of the three questions that asked about English language proficiency. All other items that asked about academic reading difficulties, compensatory strategies and resources were formulated from the findings of the first phase, in accordance with the rationale for starting this mixed methods study with a qualitative phase.

The survey was divided into six sections. It started with a welcoming message that worked as a further information sheet as it described the study and its objectives. In addition, it explicitly stated that participation was voluntary and that the responses students were about to give would be dealt with in an anonymised form. The second section related to the demographic details of the respondents. Third, three items asked about students' perceptions of their

English language proficiency. Fourth came the survey items, a total of 23, which asked about academic reading difficulties. The fifth section covered strategies and comprised 21 items. The sixth and the final section asked about the resources the students may have used to cope with their academic reading difficulties; this section had 6 items. The response options for all the survey items differed depending on the questions. For instance, some of the demographic detail questions were multiple choice questions while others were left open for the respondent to write the response. The majority of the survey questions involved a rating scale: a 5-point Likert scale was used (strongly agree=5, agree=4, neither agree nor disagree=3, disagree=2, strongly disagree=1). According to Cohen, Manion & Morrison, 2011, p.384) this form of rating scale with different degrees of agreement or disagreement would 'allow a degree of discrimination': the rating scale has two levels of agreement and two levels of disagreement allowing respondents to find a point which to some extent echoes their perceptions. If the scale has a midpoint, there is a tendency to choose that point (Cohen et al., 2011); however, I decided to include that option as I believe that there were some students who were unsure and wanting to choose that response. Furthermore, the response of 'not applicable' (=0) was added to all questions that required respondents to choose a response from the Likert scale. The reason why this response was added was that the anticipated participants could well be postgraduate taught programme students or, equally well, postgraduate research students. Some of the items were not applicable at all to postgraduate research students, such as item no.33: *I find academic papers easier to understand after listening to lecturers' explanations about the topic*, and item no.40: *I find it difficult to read because the core references are not available in hard copies in the university library*. Therefore, this option made

the survey item choices more meaningful to all the participants regardless of the academic programmes they were enrolled in, and this would eventually maximise the accuracy of the participants' responses and at the same time reduce the tendency to choose the neutral response 'neither agree nor disagree' in those cases where the items were not applicable to their situation. The survey was written on the web platform Qualtrics.

Operationalisation of the second phase constructs.

Demographic data.

Students were asked to respond to 13 questions covering various areas: gender, first language, length of enrolment in the current academic programme, length of stay in the UK, level of study, subject area, enrolment in the pre-session course, if they had taken the IELTS test, IELTS overall score, IELTS reading module score, or, alternatively, what other English language test they had taken, and if they were dyslexic.

The scale of total perceived level of difficulty.

The section covering total perceived level of difficulty consisted of 23 items that related to academic reading difficulties. Participants' scores in this scale indicate their perceptions about these difficulties: a higher score means they encountered a high level of difficulties, whereas a lower score indicates a lower level of difficulties encountered. Students' scores could lie between '0' and '115'.

The International English Language Testing System: An Overview of IELTS

The test that was employed in this study to represent the English language proficiency of the participants of the two phases was the IELTS. Although IELTS is only one of the linguistic measures that the University used

to ensure that international applicants achieved the required level of English language proficiency, it seemed that it was the most popular tests among the study participants.

IELTS is a standardised test with considerable influence on a student's academic career. It takes the form of a proficiency test capable of being employed for many purposes, although its academic module is generally used to indicate a student's readiness to join an institution using English as the medium of instruction. It has an objective method of scoring for reading and listening. Writing and speaking are scored according to specific criteria (IELTS scoring in detail, 2019).

Validity.

In order to improve the quality of the survey, two aspects of its validity were verified: face and content validity. Given that the survey was administered through an electronic platform, namely Qualtrics, the survey link was sent to an expert user of that platform to check the face validity. He was asked to give feedback and comments about the general layout of the survey, the font and the size used. He gave thorough and helpful advice to which I acted accordingly.

In order to check if the survey was measuring what it was designed to measure, it was sent to several experts in language education and the ESL arena: two were senior lecturers in language education, eight were PhD students majoring in TESOL, and one held a Masters' degree in TESOL. Their comments drew my attention to a number of items, and changes were made.

Piloting the survey.

Before using the survey to collect the data, the link was sent to a number of postgraduate students: either second or third year PhD, or EdD students. They were all international students. I received back 14 responses. I used the data to check the reliability of the total perceived level of difficulty scale. Cronbach's alpha was run and it was .869, which is acceptable; however, after looking at the total item statistics, the corrected total item correlation of two items of the scale was negative and the Cronbach's alpha increased when these items were deleted. As a result, these items were deleted from the survey. They were: *A lack of background knowledge of my discipline means that I am unable to understand some texts*, and *I may misinterpret what the author is trying to say*. There were three more items for which the corrected total item correlation was low but it was not negative. Moreover, the Cronbach's alpha value did not increase if these items were deleted. Therefore, they were kept in the survey.

3.6. Sampling Techniques

For the first phase of the study, a purposive sampling technique was used. To be more specific, amongst the various approaches to purposive sampling, the one used in the first phase was criterion purposive sampling. This means identifying the individuals based on specific criteria (Bryman, 2012; Onwuegbuzie & Collins, 2007). In this way, I ensured that the participants were selected according to how much information they could offer, as they were selected according to specific criteria. They needed to be international students for whom English was used as a second language. They also needed to be in their first year of study. This is due to the assumption that first year might be

more challenging than other years. They also needed to be studying at postgraduate level because they had different study requirements that can reflect the importance of academic reading. A large number of international postgraduate students attending either postgraduate taught programmes or postgraduate research programmes at a university in the South West of the UK were approached in various ways to participate in the first phase of the study. Another important characteristic of the participants was that they were in their first semester of study of the 2016/2017 academic year.

I approached students from different schools. I received back a total of ten emails/text messages from people who were interested in participating. I failed to get a response from one of them in the second round of interviews resulting in only nine participants for the two rounds. With regard to the number of participants, it has been suggested that the qualitative researcher should continue collecting data until he/she achieves data saturation (Bryman, 2012; Onwuegbuzie & Collins, 2007). When no new evidence emerges, the researcher should stop collecting data. Therefore, the actual number of participants was primarily determined according to the adequacy of data collected.

In the first phase, there were nine participants: six females and three males. They were from different schools: one of them was from the College of Life and Environmental Sciences (Psychology Department); all other participants were from the College of Social Sciences and International Studies (five were from the Graduate School of Education and three were from the institute of Arab and Islamic Studies). Except for one participant, who was taking some courses as part of an exchange programme, they were all enrolled

in master's taught programmes. They were from different linguistic backgrounds in that the sample included students with Arabic, Indonesian, Chinese, French and Malay as their first language.

It is worth noting that the exploratory sequential design involved two different samples with the same characteristics (Creswell & Plano Clark, 2011); in other words, for the two phases, data was obtained from the same population and therefore the relationship between the first and second phase samples was parallel (Onwuegbuzie & Collins, 2007). In this study, the population comprised international postgraduate students in the first year of their academic programme. However, sampling techniques differed from one phase to another. For the first phase, it was a criterion-purposive sample but when it came to the second phase of the study, and because the methodology that framed that phase had shifted to a survey methodology, the entire target population, which was the international postgraduate students in the first year of their academic programme, was included. This means that a simple sample was used wherein all individuals of the targeted population have the chance of being selected to participate (Onwuegbuzie & Collins, 2007). This sample was used for two reasons: first, a low response rate to the web survey was expected in advance; second, there was a need to get as many responses as possible to strengthen the statistical inferences that were obtained at this stage. Thus, these two reasons contributed to my decision to survey the entire population of students who shared the same characteristics as the first stage sample. It is worth noting that an important exclusion criterion was applied to exclude those students who had been informants in the first stage because the inclusion of the first phase participants would result in duplication (Creswell, 2014).

According to the university statistics, the total number of international students who joined the targeted university to pursue their studies in the academic year 2016/2017, in particular in taught programmes, were 1124 male/female students, whereas the postgraduate research students who were registered as international in that year comprised 448 students, forming a grand total of 1572 international students at postgraduate level in that academic year.

The participants of the second phase numbered 77, speaking a variety of languages: 3 spoke Spanish, 26 Chinese, 2 Turkish, 6 Indonesian, 18 Arabic, 4 Malay, 2 Urdu, 2 French, 2 Korean, 2 Greek, 2 Romanian and 2 Malayalam. The following languages were represented by one participant each: Yoruba, Gujarati, Vietnamese, Italian, Russian and Macedonian. 62 of the respondents were female students accounting for 80.5%, whereas 14 were male students accounting for 18.2%. One respondent failed to comment on gender.

Respondents were from different majors across different schools. Table 2 indicates the schools represented with the number of participants from each school. One participant did not specify the subject area.

Table 2

Breakdown of university schools and subject areas of survey respondents

| School | Number of participants |
|--------------------------------|---|
| Business School (25 responses) | 2Accounting and Taxation 1Behavioural Economics and Finance 1 Business Management 1Economics 2 Finance and Investment |

| | |
|---|---|
| | 1 International Management 5 International Tourism Management 5 Management 1 Finance and Marketing 2 Marketing 3 Human Resource Management 1 Engineering Business Management |
| College of Humanities (8 participants) | 1 Archaeology 2 Drama 3 English Literary Studies 1 Translation Studies 1 Theatre Practice |
| College of Life and Environmental Sciences (8 responses) | 1 Biosciences 6 Psychology 1 Sport Sciences |
| Medical School (2 responses) | 1 Genomic Medicine 1 Medical Studies |
| College of Social Sciences and International Studies (31 responses) | 1 Anthrozoology 2 Law 1 International Human Rights Law 1 Middle East and Islamic Studies 1 Philosophy 1 Politics and International Relations of the Middle East 1 International Relations 2 Public Administration 1 Sociology |

| | |
|---|--|
| | 7 TESOL 2 Special Needs Education 11 Education (not specified) |
| College of Engineering, Mathematics and Physical Sciences (2 responses) | 1 Renewable energy engineering 1 Physics |

3.7. Data Collection Procedure

3.7.1. Data collection procedure of first phase.

Think aloud protocol (first and second round).

Within the current study context, the think aloud protocol was used as one source of data in the first phase, as students were asked to say 'what they are thinking and doing while performing a task' (Goh & Hashim, 2006, p.5). In other words, while a participant reads a text, the think aloud report forms a verbalisation of his/her mental processes.

Three weeks after the start of the first term, I started meeting the participants. Sessions were conducted either in my office in the central research hub or in the group-study rooms in the university libraries and in study areas across the university campuses. When we met, they were given an information sheet that described the study aims and methods (See Appendix no: 6). Although when I first contacted them they had been given by email an introduction to the study and the methods that would be used, I repeated this brief introduction when we met. After they had finished reading the information sheet, they were given consent forms to sign (See Appendix no: 7).

As the participants were not familiar with the process of verbalising their thoughts about the text, they were first trained to report their thinking processes. So, for each participant, I employed two passages: one for training and the other was for collecting the data. I demonstrated the think aloud protocol to them as I started first to read the text. I stopped from time to time to say out loud what I was thinking. My comments were either summaries of what I had read or my thoughts about what I found difficult. Then, I asked each participant to read and think aloud using the training text. It did not take long to get them used to the process, as it lasted for approximately 10 minutes for each participant and was carried out only in the first round of the first phase of data collection. Then, the main text was handed to the participants to read and I started recording the reports using a voice recorder. Each participant started to read in his/her own way; they had been told to read as if they were doing so for their academic study. They read and stopped to verbalise what they wanted to say. In order not to interfere with their reading processes while they were reading, I did not use markers in the text to remind them to stop and think aloud; instead, I told them to stop wherever they felt they wanted to say something. They were asked to say out loud what they were thinking, what they did and did not understand, and what they might do as a compensatory action to help themselves understand the message of the text. I did not ask questions about specific details in the text because this was not the main focus of the study. Therefore, focusing on what they found challenging helped me locate areas of difficulty.

Although it has been suggested that the researcher should keep silent to prevent interruption to the thinking process (Van Someren et al., 1994), it has also been asserted that probes are better used when a participant is silent

(Afflerbach & Johnston, 1984). In this study it was preferred not to interrupt their thinking and reporting processes; hence, the researcher's role lay exclusively in audio-recording the procedure, and encouraging only silent participants to keep on talking, as Van Someren et al., (1994) suggested. Another idea was to ask "What are you doing now?", as this can elicit rich reports from participants (Afflerbach & Johnston, 1984). I made use of this question along with other prompting remarks such as "Can you explain what you mean?" or "What specifically made this part difficult?". This helped me keep reluctant participants talking. Furthermore, some participants kept reading long extracts without stopping to think aloud, and I found myself asking them to stop reading for a while and to say what they were thinking at that point.

In the first round of data collection, each participant was allowed 20 minutes to read the think aloud text. The amount of text they read of the book chapter or the journal article differed from one participant to another. However, the think aloud protocol took approximately 20 minutes for all the nine participants except one who asked to stop reading three minutes before he completed the suggested time. In the second round, each participant was allowed ten minutes to read the think aloud text. After the participants had finished the concurrent think aloud report, they were asked to perform the retrospective think aloud protocol, in which they were asked to reflect back on their reading and add any details they liked with regard to what makes academic reading difficult and how they coped with these difficulties.

Semi-structured interviews (first and second rounds).

The semi-structured interviews were a complementary source of data for the first phase. After each participant had finished the retrospective think aloud

report, we started the interview. In the first round, the interviews lasted approximately 40 to 55 minutes. Initially, the interview questions were the same for all participants but each interview took a different direction according to the participant's responses. Interviews were also voice-recorded.

The second round of interviews aimed at tracing the changes over time in participants' perceptions, and they therefore lasted for a shorter time, taking about 20 minutes for each participant. There were common questions for all participants in the interview schedule of the second round; however, the interview schedule was aligned to each participant according to his/her responses. (See Appendix no: 4 for an example of the second interview schedule.) Figure 2 summarises the phase one data collection procedures.

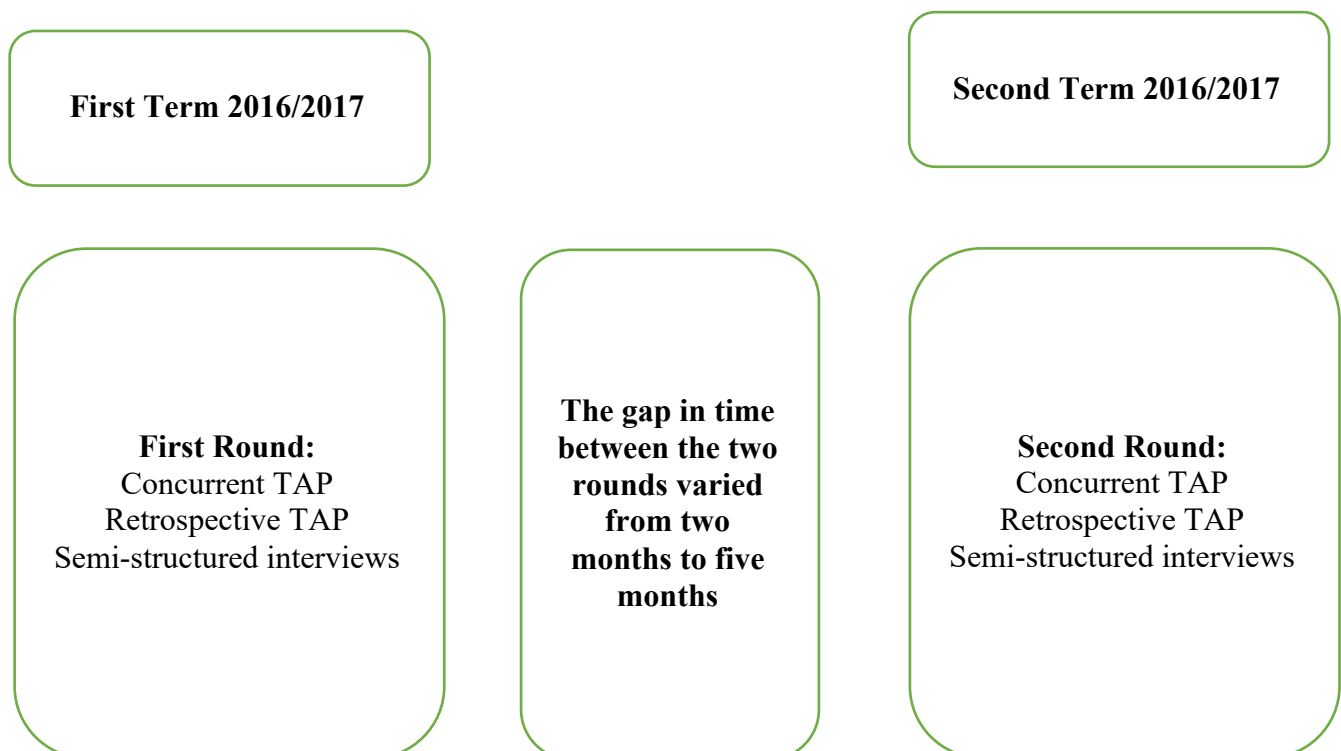


Figure 2. Phase 1 data collection procedure

3.7.2. Data collection procedure of second phase.

Different steps were taken to ensure the survey was accessible to all the international postgraduate students in the university. First, I liaised with the graduate research school office and they consented to send the survey link on my behalf to all other doctoral colleges so that they could pass it on to their updated list of postgraduate doctoral level students. Second, I discussed the possibility of sending the survey link to the postgraduate students in taught programmes with all taught programme coordinators in the university. I contacted them in person or by email. They also sent it to all registered students in their colleges. Third, an English language teacher in the English language institute sent the survey link to all the postgraduate students who were registered on the in-session courses. Fourth, on 21st June 2017 the survey link was also included in the international news magazine that was issued by the international student support office, in the hope that all postgraduate students across all disciplines in the university would receive that email.

The email started with a cover letter that stated clearly and in a large font who the participants should be (See Appendix no: 8). It also briefly described the study aims and the data collection procedure for the second phase. This email included the link for the survey and this link in turn took the reader to another brief description of the study. The decision to include the consent form in the link was taken to comply with the ethical rules the university abides by, for without these it would not have been possible to approach the students. If the respondents decided to take part and clicked on the button 'take the survey' that meant they gave their consent and the responses were then automatically coded. I exported data to SPSS to be analysed.

The survey remained active from the 2nd May 2017 till the end of July 2017. In July, I noticed that responses were few. To increase the response rate, I went in person to collect some more responses and I met a number of international students in the library and in the English language institute building. My tablet was used to make the process of filling out the survey easier. In this way I managed to encourage a small number of students to participate. All in all, the data collection procedure lasted for a full academic year, to be precise from the 10th October 2016 until the end of July 2017. Figure 3 summarises the data collection procedure of the two phases.

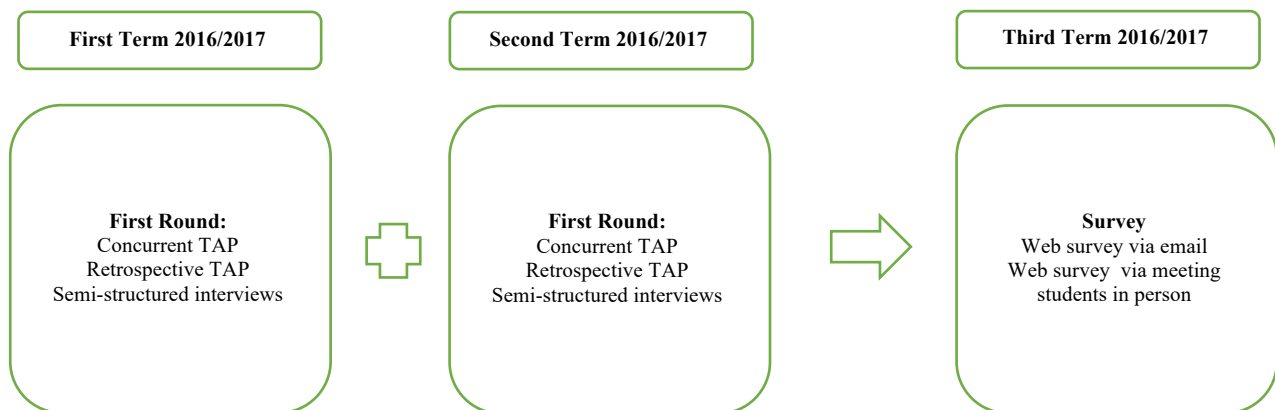


Figure 3. Data collection procedure of the two phases

3.8. Data Analysis

The most important considerations according to which data analysis decisions are usually taken relate to the research questions and the type of data collected (Schensul, 2011). The questions in the first phase entailed the collection of qualitative data via the think aloud protocol and semi-structured interviews, which gave a detailed account of the academic reading. As the data were voice-recorded, first of all a transcription was undertaken by myself for each participant's think aloud session and interview (See appendix no: 9 for a sample of transcription). It was a time-consuming stage but it brought me closer

to the data. After I finished transcribing, and in the initial stages, I enjoyed reading and re-reading the think aloud reports and the interviews rather than just listening to them, as this enabled me to add notes wherever I felt the need to write something about the data. Subsequently, this enabled me to code the first round of think aloud and interviews manually. For the second round, Nvivo software was used for coding.

Coding refers to the classification of themes, topics and types of participants (Schensul, 2011). In this initial level of analysis, the researcher dissects the data and assigns a meaning to each part (Stake, 2010). To me, coding was like data-entry in quantitative research as it helped me organise and label different slices of data. Therefore, while coding, I was writing notes and analytical summaries with each slice of data I thought might be an answer for any of research questions (See appendix no: 10 for a sample of codes and appendix no: 11 for a sample of coding stage). I then started to categorise the students' accounts according to a list of useful themes or what can be described as possible answers to research questions, such as language-related difficulties, dissatisfaction with one's English language proficiency, and compensatory strategies, and then variations within each category were pinpointed. I can describe this process as variable-oriented analysis. It is also known as thematic analysis across cases (Onwuegbuzie & Leech, 2006). During this stage, the data were approached in two different ways. I approached some slices of data with certain codes in mind drawn from literature; this approach is known as analyst-driven thematic analysis or the deductive approach (Braun & Clarke, 2006). On the other hand some important themes emerge that are not discussed in the literature and these should not be overlooked; it is important to stay open to what participants say and not to

overlook what they think even if it is not covered in the literature (Magnusson & Marecek, 2015). This approach is the opposite of the previous one and can be called data-driven analysis (inductive) (Braun & Clarke, 2006). Furthermore, I paid close attention to what each participant had said and I believe that by adopting this approach, I stayed true to the richness of the qualitative data obtained. In effect, this approach resulted in some new themes emerging through the analysis, for example, translanguaging as a difficulty while reading for academic purposes.

Besides this section of the findings that directly finds answers for the research questions through the use of thematic analysis, there was another section which came earlier in the findings chapter. I attempted to draw a portrait of each participant making use of my memos and the participants' responses during the sessions. These participant-oriented accounts, I believe, would help a reader make sense of my interpretations.

For the analysis purposes of the survey data, SPSS software was used. Data were imported from the Qualtrics platform into SPSS software. Before running any test, the file was screened for missing data. Initially, the total number of responses was 123; however, after screening the final number was 77. This was due to the exclusion of some responses which did not meet the criteria. 34 responses were excluded as the participants had either provided demographic details without responding to the other survey items or they had not given any response at all to the survey items and it was just registered as a participation because they had clicked on the survey link. Four participations were also rejected as the students were dyslexic; five responses were removed because the participants' first language was English and therefore they were

not ESL students; three more responses were removed as the participants indicated that they either took another English language proficiency test other than IELTS or they had not taken any test at all. It is also important also to note that 13 of the 77 participants had taken their IELTS test before May 2015, thus making their IELTS scores invalid as the survey was first released in May 2017 and the IELTS test result is valid for only two years. However, I decided eventually to include them as the correlational test was conducted once with them being included and a second time excluded and ended with the same result.

After the omissions, the total of perceived level of academic reading difficulties was computed. Descriptive statistics were reviewed. In addition, Cronbach's alpha for that scale was calculated to ensure internal consistency; internal consistency was .876 (for 23 items). This value is considered to represent a very good to acceptable level of internal consistency of a scale (Cohen, Manion & Morrison, 2013; Multon & Coleman, 2010).

For the difficulty scale, the Kolmogorov-Smirnov test was run to check if the data were normally distributed. As indicated in Table 3, the result was .121, with a significance level of $P = .010 < .05$. This indicates that the data were not normally distributed.

Table 3

Normality test of difficulty scale

| Tests of normality | | | | | | |
|-------------------------------------|---------------------------------|----|------|--------------|----|------|
| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Total perceived level of difficulty | .121 | 73 | .010 | .935 | 73 | .001 |

Furthermore, based on looking at the histogram in Figure 4, it seems to show a slightly negatively skewed and leptokurtic distribution.

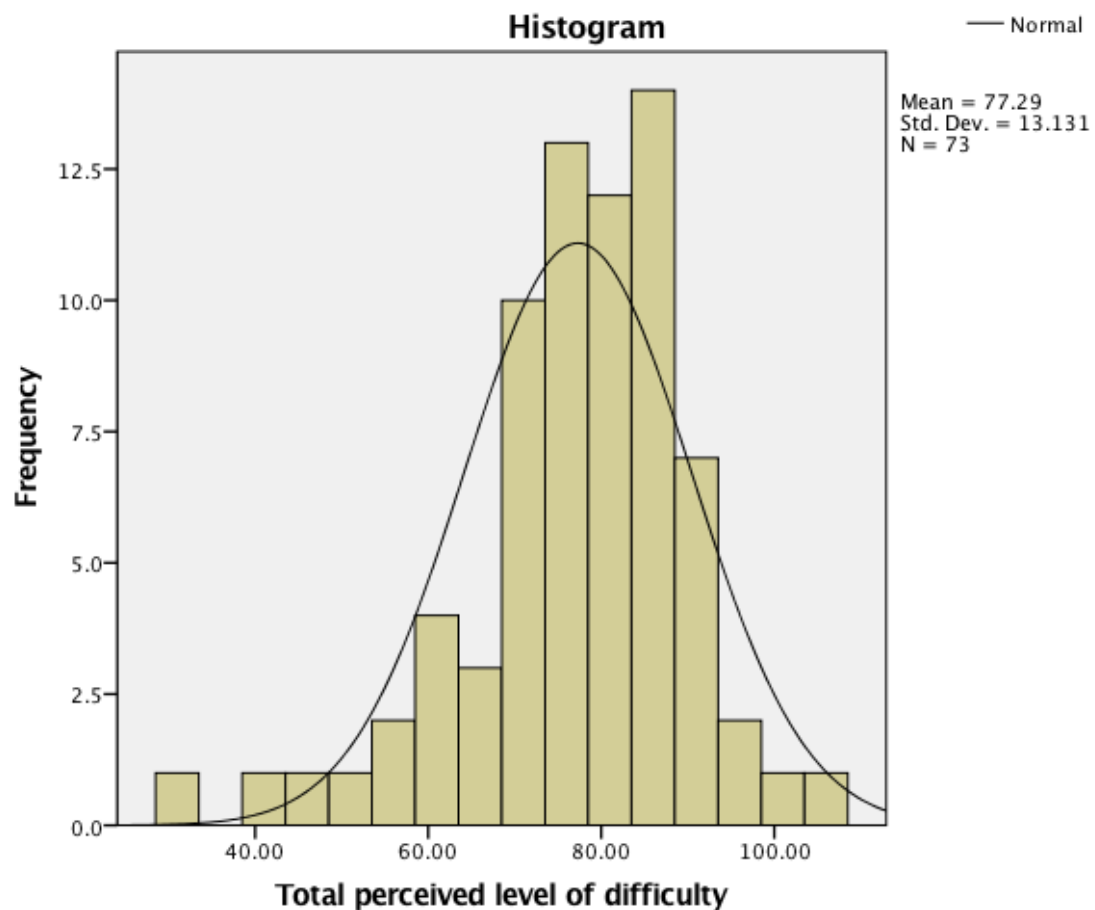


Figure 4. Testing Normality for total perceived level of difficulty (histogram)

Finally, correlations between the total score of perceived level of difficulty and students' English language proficiency (as measured in IELTS overall scores and reading module scores) were calculated to identify how students' English language proficiency affect their perceptions about academic experience. For this correlation, the non-parametric Spearman correlation test was used. The decision to use this non-parametric test was taken for two reasons: first, according to Cohen et al., (2011), non-parametric tests are usually linked to data drawn from surveys and questionnaires; second, Normality assumption had been violated.

3.9. Data Integration

In the literature, researchers distinguish between mixed methods designs and mixed methods models. To be more specific, an approach is considered a mixed methods design when it implies the 'inclusion of a quantitative phase and a qualitative phase in an overall research study' (Johnson & Onwuegbuzie, 2004, p.20), whereas a mixed methods model refers to mixing qualitative and quantitative approaches within or across the different stages of research (Johnson & Onwuegbuzie, 2004). Keeping in mind these two classifications of mixed methods research, it is easy to infer that a mixed model maximises the potential benefits of the use of the components of the two approaches at different stages of research, starting from the research questions and ending with the findings.

In addition, based on the framework proposed by Yin (2006), any single study will not have mixed methods potentiality unless integration takes place in the different procedures of the research. In addition to analytic analysis, which is related to data integration, there are other procedures that include research questions, units of analysis, samples of study, instrumentation and data

collection. Without integration, the research might be considered as two separate studies investigating the same topic. In short, the 'more a single study integrates mixed methods across these five procedures, the more that mixed methods research is taking place' (Yin, 2006, p.42).

This study used an exploratory sequential design in which two stages were conducted sequentially and the two approaches seemed separate. According to the aforementioned classification, the exploratory sequential design might not be considered a mixed model, as the latter implies mixing the two approaches either within or across the different stages of research. Furthermore, the rationale for using this design is instrument development and therefore a study that embraces this design has not been set up to integrate the two strands of data. However, it is been suggested to explore the connection between the two strands of data even if the study has not been set up to integrate them (Bryman, 2007). Thus, because of the aforementioned importance of integration, the two strands of data in the present study were integrated, making it a mixed model study.

Two strategies were applied to achieve integration. First, the think aloud protocol findings and the semi-structured interviews informed the design of the subsequent survey. Survey data were profoundly affected by the findings of the think aloud reports and interviews. Therefore, this is, in my opinion, the first way of integrating the two strands of data.

Second, data comparison was used. It is one of the cross over (mixed) analysis wherein the qualitative and quantitative data are compared (Onwuegbuzie & Combs, 2010; Onwuegbuzie & Teddlie, 2003). I presented and interpreted the results of the qualitative phase data and the quantitative

data in the findings chapter to justify one set of data findings with the other. In this case, the richness of the qualitative data was not lost, as the data from the think aloud protocol and interviews were initially analysed qualitatively before the stage of integration; this allowed new findings to emerge. Such procedures enable the researcher to determine any areas of divergence between the two strands of data (Plano Clark et al., 2010). This happened when some of the quantitative findings did not corroborate the qualitative findings. Indeed, this relates to the answer to the final research question.

3.10. Research Ethics

Each researcher must abide by certain ethical guidelines. Indeed, these are culturally located (British Educational Research Association, 2011), making it difficult to identify ethical guidelines that could be applicable to different cultures. However, a number of associations (e.g. BERA and AERA) have worked continuously to produce these guidelines. Moreover, each institution has its own ethics board that reviews the research conducted within the institution. This section will highlight the key principles that constitute the ethical standards and challenges I was obliged to meet while conducting this study.

First and foremost, prior to commencing the data collection process, there were three steps that needed to be taken, starting with obtaining the approval of the ethical committee of the university involved. The application to this committee was supported with details of the research aims, the data collection methods, the procedure and other pertinent details. (See Appendix no: 12) for the ethics application with reference number and the certificate.). Second, since obtaining participants' informed consent is central to conducting educational research (British Educational Research Association, 2011), two consent forms were prepared for participants. During the first phase, students

who participated in the think aloud protocol were given a consent form prior to the training session (See Appendix no: 7). For the second phase, an invitation to the survey link was sent out in the email to the postgraduate students at the university by the postgraduate programmes offices, and this contained relevant details (See Appendix no: 8 for the email cover message). In each consent form, a brief account of the study was given to the participants. In addition, the researcher made it clear that participation would be voluntary, as required by the British Educational Research Association (2011). Moreover, because participants' autonomy should be preserved (Hammersley & Traianou, 2012; Wellis, Jost & Nilakanta: 2007), they were assured that they had the right to refuse or withdraw at any stage of research, as well as the right to ask for their data to be destroyed. In this regard, two problems arose while I was collecting data. The first was when one participant in the first phase of the study and after she had completed the first think aloud session and the interview in the first round, did not respond to the two reminders I sent her to meet for the second round. To abide by the ethical guidelines, I decided not to send her additional reminders as this would work as an imposition on her to participate in the second round. Eventually her case was considered as attrition.

The other important ethical issue occurred during the second phase: as I was trying to increase the response rate, I decided to go to the university campuses and meet students who might be willing to participate in the survey (See Appendix no: 13 for the additional ethics application with reference number and the certificate especially produced for this purpose). I planned to give them information sheets and consent forms in paper to sign if they showed any interest in taking part. Nonetheless, I felt that my presence could pressure the students to participate even if they were not fully interested. The way out of

this predicament was to ask if they were willing to complete the survey later in their own time. I made it clear that, instead of filling out the survey while I was waiting, I could send the survey link to their emails. This assured me that those who chose to participate were fully willing to do so.

Another important principle is that participants should be told in detail what they are supposed to do and how their data will be stored and published (Wellis et al., 2007). To be more specific, participants in this study in both phases were informed in advance about the demographic information they would have to give, in addition to the kinds of questions they were supposed to answer. Consent was also obtained to voice-record the students' reports and interviews in the first stage of this study. It was explicitly indicated that their participation was necessary to the research and that, in effect, their involvement might help other international students who have academic reading difficulties. Some believe that introducing a request to participate in a study on the grounds of participation importance should happen only rarely (Stake, 1995), and it is understood that such an orientation might put pressure on participants to take part. Nonetheless, it is important to highlight how the study is significant by indicating that, if the study proved to be beneficial, it would be so for other international students who experience academic reading difficulties, without claiming that the participants themselves might also receive these benefits. In this way, successful demonstration of the importance of the study could increase the response rate without imposing on students to participate. Participants were also informed that the research data would be used only for academic purposes and that their data would be accessible only to the researcher and supervisors. They were also assured that if any verbatim

responses were to be included in the research report, this would not be done without their permission.

Another fundamental principle of ethics that was taken into account is maintaining confidentiality. This pertains to anonymising responses and the importance of this to conducting research ethically. To achieve this, the verbal reports and interviews were transcribed by the researcher herself. During the data management phase and through the writing up of the research report, pseudonyms were used instead of participants' real names. In addition, the survey responses were recorded without names. According to the Ethics Committee of the British Psychological Society (2009), the researcher should limit the publication of participants' details to what is crucial for the research. Thus, I aimed to publish only what is necessary to understand the context of the research, which is not likely to cause any detriment to the participants.

Confidentiality should also apply to the place in which the data is kept. Therefore, participants were also informed that the data would be stored in a safe place: the verbal reports and the survey data were saved electronically in the university U-Drive, while hard copies of the verbal reports and interviews were kept in a locked locker in the university.

Based on the guidelines of the Ethics Committee of the British Psychological Society (2009), the informants should be told about any expected detriment. It is argued that no predictable detriment is likely to occur as a result of taking part in this study, except for the considerable amount of time needed, either in collecting data in the first stage via the use of the think aloud protocol and interviews for two rounds or for completing the survey. I decided to keep the participants informed of the time estimated for completing the process in

each consent form and an estimation of time needed to complete each stage was indicated clearly to the participants in both phases.

3.11. Researcher's Role

Throughout the whole process of conducting this research, I have always described myself as having the identity of both a researcher and a participant. The effects of this positionality on research have been classified as either advantageous or disadvantageous. Regarding the advantageous effects, I am an international student who gained Bachelors and Master's degrees in English education and I am currently pursuing studies in an English-speaking country, namely the UK, using English as a second language; and right from the beginning, I could not help reflecting on my own experience in academic reading, thereby allowing a start to be made to the preliminary data collection stage. During that early stage of my research journey, I worked as a mentor for a group of five MSc students, four of whom were international students who were complaining of academic reading difficulties. This, at an early stage, gave me the opportunity to figure out what sort of difficulties other international students face. In addition, being an international student myself created an atmosphere of ease between me and the participants as they were able to discuss a number of academic reading difficulties. Participating in this research could be considered by some as unpleasantly stigmatising them as students who were not able to cope. However, I have always emphasised my international identity when I speak to them and sharing an international background, I believe, has helped them to open up and discuss their difficulties freely. I also think that my international identity enabled me to understand their stance, especially when they reported a difficulty such as translanguaging that could only be experienced by a second language user.

With regard to the disadvantageous effect of my dual role, humans are perceived in research 'as some of the main instruments' (Stake, 2010, p.36). So, as a researcher, I was an instrument myself as I planned, designed the other instruments, decided on the reading texts, conducted the think aloud sessions and the interviews and finally transcribed, analysed and interpreted the findings of all of the data. I can say that, during the whole process of taking these steps, I was unable to switch off my identity as an international student who uses English as a second language. The value of the insider position has obvious advantages in terms of identifying with the constructs I was researching, nevertheless this position also might be viewed as problematic given the absence of absolute neutrality. To address this issue, I have considered two steps that could increase confidence in my interpretations. In line with what Stake (2010) considered as a strategy used by researchers to express scepticism about the interpretations they give, during the first phase, the use of two different methods (both the concurrent and retrospective think aloud protocols together with the interviews) repeated at two different points of time, helped me validate my interpretations. Second, I attempted to introduce what was particular about each participant in the first phase in detail (See 4.1). I believe these detailed descriptions are beneficial as they provide a background on which I can build my interpretations.

With regard to the second phase, my role was different. On my behalf, each school office sent the survey to the postgraduate students. Although the email included my contact details, I had no direct contact with the participants. It was only later in the academic year, when I tried to increase the response rate, that I visited the main library and contacted some of the international students there. I received questions from some who were willing to participate but my

role was only to invite them and to explain the main purpose of the survey rather than negotiating the survey questions. However, I cannot claim that my role was neutral in this stage as I am the one who designed the survey, analysed its data and interpreted the findings. To conclude, the methods used in each stage determined my role, with the result that my roles were different in the two stages.

Chapter 4. Results

In this chapter, the research findings will be presented. A sequential exploratory design was used in this study. The first phase questions entailed the collection of qualitative data. Pre- and post-TAP interviews were used, together with concurrent and retrospective TAP, all applied in two rounds for the first stage to give a detailed account of the academic reading. The data of this phase were individually analysed. The findings will be shown in sections: 4.1, 4.2 and 4.3. The first part 4.1 will introduce the profiles of the nine participants in the first phase of research. The following two parts 4.2 and 4.3 will present the findings of academic reading practices of students and students' perceptions about academic reading that had only been explored in the first phase.

In addition, students' perceptions about their English language proficiency, academic reading difficulties, strategies that students adopted to cope with them and factors that helped students to overcome academic reading difficulties were also explored in the first phase. Thematic analysis was used to analyse the data and the findings will be shown in 4.4, 4.5 and 4.6. In accordance with the rationale for starting this mixed methods study with a qualitative phase, the findings of the first phase in relation to students' perceptions about their English language proficiency, academic reading difficulties, strategies and factors that helped students to overcome academic reading difficulties were used to formulate the web survey items. For the second stage, data were separately collected and analysed. After data of each stage were analysed individually, the findings of the two phases were integrated to find out the extent to which the survey findings confirm the findings in the first

phase. Thus, the findings of the two strands will be presented in parts 4.4, 4.5, and 4.6 and integrated by the means of comparison.

Furthermore, the results of the correlational relationship between students' English language proficiency (as measured by IELTS) and their total perceived level of academic reading difficulties will be presented from the second data set as this was only investigated in the second stage.

4.1. Profiles of the Participants in the First Phase

The participants were recruited according to several criteria: they were all international students for whom English is either a second or third language; they were pursuing their studies in the UK as full-time students; they were all in their first year of study; and they varied considerably in terms of their linguistic proficiencies and in other personal aspects. Therefore, I decided to include the profiles of the nine participants to highlight what I believed would help readers to understand how each participant's data were interpreted. Further details relating to the demographic information is outlined in the methodology section. It is worth noting that all the names of the participants are pseudonyms.

4.1.1. Reem.

Reem was a Saudi female student of Arabic background. She came to the UK to study English and spent nine months doing so before she joined a Masters in Special Educational Needs programme. Reem was unable to achieve the required IELTS score for international students of that programme (6.5), scoring 5.5 in the overall IELTS and 6 in the IELTS reading module. Therefore, she enrolled in a pre-session course in the English language institute at the university for ten weeks. She commented on her linguistic proficiency as being not at a high enough level to study in the UK. Reem

seemed aware of her linguistic ability and the level of difficulty that study imposed on her; however, she extended her answer to a question about her linguistic proficiency, saying, *“my language is just ... I can study with double challenge”* (Interview 1).

Despite her comments, unlike most of the participants, Reem showed self-confidence and the determination to cope with all the difficulties that she mentioned in the interviews and the TAP. I believe that this makes her distinctive among all other participants. On asked whether she thought that she would be able to cope with these difficulties and operate successfully at the university, Reem answered decisively, *“Yeah, I think so, there are some challenges but students can ... understand, study, and have a high score”* (Interview 1).

In an overall comment in the first interview, she also made it clear that she was proud of herself for being able to read the TAP text and understand it: *“I am proud of myself because I understood this. I have a background knowledge of lots of vocabulary in this area”*. It is worth noting that the first interview was conducted just three weeks after the start of the academic programme. Within this short time, she believes that her lexical resources had improved. In addition, her words indicated a self-awareness of the points of strength of her performance and a willingness to overcome academic reading difficulties.

In the second interview and TAP session that was conducted just over five months later, Reem reported some changes, suggesting that she had improved. She mentioned that she was tending to work more independently rather than depending on the help of others to overcome the problem of lacking background knowledge. She had shifted to using an English-English dictionary

to find the meaning of some unknown concepts instead of asking colleagues, as seen in the following excerpt from the second interview:

Researcher: You said earlier that you ask native speaker or lecturer to help you overcome the difficulty of lack of background knowledge. Do you do the same?

Reem: Sometimes, but now I search about the word and read about it read about it in English to English dictionary.

Later, referring to sources of support, Reem commented, “*Sometimes I work independently*” (Interview 2). Reem’s performance in the first TAP session was characterised by the use of many strategies that would support comprehension, such as re-reading sections for better understanding and using prior knowledge. Overall, she was able to summarise some of the paragraphs that she read and to find the overall meaning of the text.

In the second TAP session, Reem exhibited less use of some strategies, which can be attributed to the shorter length of the text that she read in the second session or to the text content and difficulty. Her difficulties predominantly revolved around unknown vocabulary, and even in the retrospective TAP report she pointed out that understanding the key words in the abstract would enable her to understand the whole article. However, she was able to obtain the gist and communicate the overall meaning of the paragraphs.

Regarding Reem’s perception of her English language proficiency, it did not appear to have changed significantly by the second session, but I found her to be more realistic about her linguistic ability. Reem described her English language proficiency as “*not in the high level.... I think not in the high level and not in the low level, it is in between*” (Interview 2).

4.1.2. Amy.

Amy was a female student of Indonesian background. She was a Masters of Education student in Teaching English to Speakers of Other Languages (TESOL). She arrived in the UK just a month before the start of the programme. In IELTS, she scored 6.5 overall and 7 in the reading module, therefore achieving the required IELTS score for that programme.

Unlike most of this phase's participants who had not had the chance to use English in academic study before they started their current programme, Amy was privileged as she had completed her bachelor's degree with English as the medium of instruction. However, she felt that she needed some linguistic help and therefore opted to join the in-session course that the English language institute at the University offered to international students. It must be highlighted that this course is designed for writing but it is also related to reading. According to Amy, the in-session course was not particularly helpful because of her background. On asked whether she had found the in-session course helpful, Amy replied, "*...after the writing session, some students say ok I have to change my writing, they say it helps but actually have known about writing blah blah*" (Interview 1).

Amy was not satisfied with the support that she had received at that time, and she relied on her background in TESOL. She showed that she was aware of some writing techniques and, therefore, was not impressed by the English language support she had received.

Amy reported relatively similar difficulties to the other participants. However, in the first session, she confidently said that it was only difficult at the beginning. Amy demonstrated confidence and trust in her English proficiency,

believing that she would be capable of coping with any difficulties. Her answers also indicated her awareness that, over time, she would become familiar with what she found difficult and that things would become easier with more practice: *“Well, at the first week, it was very difficult for me. Now, I found that it is easy to learn and I believe that in future, it is going to be easier”* (Interview 1).

The above comment from Amy in the first interview suggests that she had already started to notice that learning had become easier over time. This observation was confirmed in the second interview and TAP session conducted just over five months later. She reported many aspects of change over time, including some difficulties that diminished and the changes in her use of strategies. I asked Amy about whether a large amount of unknown vocabulary still made it difficult to understand a text, as discussed in the first interview. She answered, *“I think I will just keep going ... vocabulary is not so difficult. I think my vocabulary builds now”* (Interview 2).

Amy’s perception of her English language proficiency was exceptional compared to all other participants, as she spoke about her English proficiency more confidently. She firmly believed that her English proficiency was at a high enough level to study in the UK, explaining, *“I can follow the lecturers when I listen to them, I can read journals in English and I can write and my scores in writing are not bad”* (Interview 2).

4.1.3. Sandy.

Sandy was a female student from China, where she finished her BA in Fine Arts. In the UK, she changed her major and joined the Masters in Special Educational Needs programme in the Graduate School of Education. In the IELTS, she scored 6 overall and 6.5 in the reading module.

During the first interview, I noticed that she took every possible chance to learn and ask questions when she felt confused. Whilst reading the TAP text, Sandy came across the expression 'I suggest' in the article and asked, "*It is an academic article yeah, why does it use 'I suggest'? ... In my pre-sessional course, the teacher told us you cannot use the pronoun (I) because it is too personal*" (Interview 1).

Sandy was a participant who attended a pre-sessional course because she was unable to achieve the required IELTS score for Education. While she was aware that she needed to improve her linguistic abilities in regard to all skills, she had already received some help in English speaking and writing, and, for reading in particular, she thought that it would be her own responsibility to practise reading more. Therefore, according to Sandy, no linguistic support would be beneficial to her. This autonomous attitude that she adopted towards learning is clearly seen in her answers below regarding linguistic support for reading:

I think for reading, I should improve my reading skills by myself. I need to read more, and broaden my words and practice more and read more... Yeah, because if the tutor tells me some strategies, I think different people have their own strategies.
(Interview 1)

Sandy was interviewed for the second time exactly five months after the first interview and TAP session. Regarding the changes over time that she reported, apart from improvements in being critical and employing less translanguaging between Chinese and English, other difficulties such as a lack of vocabulary knowledge and the inability to understand long sentences remained the same as at the beginning of the year. Nonetheless, in reading, she reported some changes, such as being more aware of what to focus on

while reading a text. Sandy reported changes to the process of reading that she had previously described. For example, she stated that she was more selective in reading specific parts of each section in any academic text, as seen in the following interview excerpt:

Researcher: And how do you read now, for academic purposes?

Sandy: The title, the abstract, and I read parts I mean for example the introduction. I will read the whole introduction and literature review just every first sentence and last sentence because content is quite ...

Researcher: Complicated?

Sandy: Yeah, I will read just.... according to what I need so maybe I will read this and read this one. If I do not need I just do not read it. (Interview 2)

Sandy's reading performance had also changed. In the second TAP session, she paid attention to the essay structure. In the second TAP report she commented:

Because it is abstract so I start to think about how the writer will go on to organise this whole essay and I prefer to read the abstract at the beginning because I can find some key words. I find some, and then it is easier for me to understand the whole structure of this essay.

Here, she talked about the text genre, and how she would elicit the text structure from reading the abstract. She knew that being aware of text structure would help her read the text more easily. At the time of this session, Sandy's perceptions about English language proficiency had slightly changed. When asked if she perceived her English to be sufficient to study in the UK, Sandy

responded, *"I do not think so. It is not enough, but maybe I think much better than before"* (Interview 2).

4.1.4. Sara.

Sara was a student who spoke the Indonesian language. She finished her bachelor's degree in English education in Indonesia and came to the UK to pursue master's studies in Educational Technology, Creativity, and Thinking. Sara scored 6 both in the overall IELTS and the reading module.

There are two important characteristics that make Sara distinctive amongst the other participants. Firstly, she was the only participant whose reading was not driven only by assignments; she found other resources to familiarise herself with the research area.

Sara finished her Bachelor's in English Education, which involved spending a four-year period with English as the medium of instruction. This could explain why she did not experience as much difficulty in reading as other ESL students, as she was familiar with reading in English. As a result, she was able to find time to study and familiarise herself with the new area of specialisation. Sara also had other reasons for being interested in reading. Her dream of graduating from this UK university motivated her to exert more effort to succeed. She mentioned her self-motivation as an important factor that helped her to cope with academic reading difficulties. She was determined not to render her learning experience useless, and therefore decided to improve her reading abilities to cope with potential difficulties: *" ... I have a dream to graduate from here and I want to be able to get a good score. I do not want to make my learning experience useless. I try to improve my reading"* (Interview 1).

In the second interview and TAP session that were conducted approximately four months later, Sara showed changes in a variety of areas. For instance, she had started to read more often. In an answer to a reading frequency question and whether she was still reading three times a week, she said, *“No, it can be more than that”* (Interview 2). The number of pages that Sara was reading each week had also increased, as she indicated, *“I do not count, may be 100 in different topics”* (Interview 2).

Sara had developed an independent approach to learning over these five months, and this was clear in her use of strategies. She believed that a lack of background knowledge would only make it difficult for her to understand a text if she did not try to understand. She referred to the change in the strategy used to overcome such a difficulty as she became a more independent learner. Sara tried to learn by herself and did not always ask the lecturer or native speakers first. This autonomous attitude towards learning was also shown on another occasion when she indicated that she no longer felt that she needed support to read long texts in a shorter period of time: *“Oh, I think now I read independently without support”* (Interview 2).

The changes that Sara demonstrated might have come as a result of being a dedicated reader. Her reading interests covered different areas; therefore, her reading was not only guided by assignments. I believe that this positive attitude towards reading helped her to notice improvements in different areas and anticipate them earlier compared to when she was first interviewed. Initially, Sara stated that she was not satisfied with her English language proficiency, and added that she would not be able to improve unless she read frequently. In the second interview, she believed that her English language proficiency had improved, undoubtedly because of her dedication to reading

practice: *"I just see that I am much improved rather than past months considering my feedback, and also I can understand the lecturers. I think I have improved but I do not know the level"*.

4.1.5. Nora.

Nora was an Indonesian student at the Graduate School of Education who joined the Masters of Education in TESOL programme. Although she scored highly in the IELTS, achieving 7 for both the overall band score and the reading module, she did not seem very confident in her ability to catch up and operate successfully at the university. She found it difficult to adapt to the new educational system of the UK, which, according to her, was completely different to the system that she was familiar with. This was Nora's main source of concern, as seen in the following excerpt from the first interview:

Researcher: When you started this course, did you feel that your English was at a high enough level to study in the UK?

Nora: I am not sure about that. I am not quite confident. I am afraid that I may not be able to catch up with this education system here in UK. My IELTS results show that I may be good enough and it somehow gives me like a kind of support or encouragement that you can do this! But still I feel like a bit unconfident!

As for her difficulties, apart from the use of academic words, Nora also pinpointed the differences between the English academic style and her first language style, considering this as the most difficult challenge:

... the style of my first language is obviously different from the style they have here. Like in my first language, we have kind of what they call redundancy style. But here in English, it seems to be more compact so it is like structure. While in my first language, they explain it step by step. (Interview 1)

This difficulty caused Nora to be unable to identify the main ideas of each paragraph of the TAP text. She mixed up two points that were discussed in a particular paragraph; what she referred to as '*compact academic style*' is the fact that many points can be discussed in one paragraph, which does not happen in her first language academic style. This eventually led Nora to search for the connection between the two points discussed in that paragraph.

The strategies that she adopted were also different from other participants. Given her IELTS score and the fact that she had completed a degree in English and was now a TESOL student, I was surprised to learn that Nora was trying to read some texts in her first language (L1) that explain the topics that she was about to study.

The second interview and TAP session were conducted four months and three weeks after the first interview. At this time, Nora reported that she had changed her method of reading a text, and had started to be more selective:

If I have like one reading or one article, I will just go to the part that I think I need, for example I will go to the abstract to get overall picture... I also go to the results of the study wondering if it is what I am looking for the most and the most important part is reading the conclusion. (Interview 2)

Behavioural data corroborated what Nora reported in the interview, as she showed a similar selective approach towards the text in the TAP session. After reading the abstract, she skipped over the introduction and moved to read the methodology section. In reading performance, Nora was dealing with the text differently. In both sessions, she was not interested in discussing the literal meaning that she found in the text, nor was she willing to make some inferences regarding what she had read. Her attention was rather more towards

highlighting the academic reading difficulties that she experienced while reading.

Nora's perceptions about her English language proficiency had also changed. In contrast to the fragile perception that she showed in the first session, her reply in the second interview indicated satisfaction with her English language proficiency and ability to study in the UK: *"No, I think my English level is fine to study but not excellent one. It is fine, it is just enough"*.

4.1.6. Sam.

Sam was from France, where he was studying politics. In the UK, he studied at the Institute of Arab and Islamic Studies, which is part of the College of Social Sciences and International Studies. Apparently, he was an international student for whom English is a second language, but at the same time, he was an undergraduate student in an exchange programme with the UK. Therefore, the criteria had been changed to allow him to take part in the study and he was selected and interviewed as the only participant from a European background in the first phase. In addition, he was in his final year of undergraduate study and had come to the UK to complete some modules before graduation. In the IELTS, he achieved an overall score of 6 and 6.5 in the reading module.

Sam's English proficiency did not seem as poor as he described, which I concluded for two reasons. Firstly, his IELTS overall and reading module scores theoretically enabled him to operate adequately in academic study when combined with other necessary skills. Secondly, during the TAP session, he was effectively able to summarise the paragraphs that he read and did not seem to be poor at comprehension, although this should be taken with caution, as the TAP article discussed the Israeli-Palestinian conflict, which is a topic that

any politics student is likely to have heard about. Based on the above, Sam would appear to be able to operate successfully in regard to academic reading; however, he stated that he did not read for academic purposes because he once tried to read and it was very difficult for him to finish one page, as he was constantly translating words:

I want to read but it was too complex for me. I wanted to understand not just read ... so I was in front of my computer and researching vocabulary in the dictionary each time I did not understand the words. For just one page, I spent may be more than an hour. (Interview 1)

Sam stated that he was demotivated to read because of his low proficiency in English and it was why he decided to read nothing. This was surprising, as the first interview was conducted a month after the start of the programme, when he was supposed to be engaged in work and reading. I believe that this did not come as a result of low English proficiency only, but also the lack of motivation that he reported.

Another issue that must be highlighted is that Sam alternated between English and French during the TAP session and the interview. Although it can be normal for an ESL user to code-switch between L1 and English, in Sam's case, it may have come as a result of a lack of vocabulary. In contrast, some of the other participants, who were also unable to express themselves clearly as they were trying to voice their thoughts during the TAP and the interview, chose to use their dictionaries to find out what they wanted to say instead of saying it in L1. It seemed likely that Sam's attitude to reading would change over time as he became more accustomed to it. This could be confirmed after conducting the second interview.

Approximately five months later, Sam was interviewed for the second time, and reported changes in many aspects of his reading. Most importantly, he had started to read for four hours every week, reading around 50 pages per week. Compared to his reading habits in the first session, this could be considered an extreme change. Some other changes were also detected in the behavioural data and interview answers. Firstly, Sam stopped code-switching, which I believe was due to him progressively building a larger vocabulary. As a result, he did not use the French language in the second TAP report and interview answers. Sam attributed this improvement to academic reading: *“My academic reading contains, let us say, more vocabulary, more complex vocabulary and that is why, I think my vocabulary get better”* (Interview 2).

Similar to his performance in the reading in the first session, in the second TAP session, he was able to read the given text and give a comprehensive summary for most of the sections that he read.

Despite this, Sam still believed that he was not able to read fluently. In the retrospective TAP report, he commented, *“I am not able to read fluently. I mean without making lots of mistakes. My expression is not very good”*. Additionally, regarding the question about his English language proficiency and whether he was happy with his academic performance so far, especially in the light of having achieved a good grade in one of the modules, Sam replied, *“Yeah, but I mean the assessment is not very difficult so I mean if it was really, you know, marking seriously. I mean yes one time I get 64 but I get those 56, 58”* (Interview 2). Both of these comments indicate that his perceptions about his English language proficiency had not changed at all.

4.1.7. Elie.

Elie was a Chinese student who had studied a Bachelor's of Science. For her master's degree, she was enrolled at the Institute of Arab and Islamic Studies. Her major was in the politics and international relations of the Middle East. Elie achieved the English language requirement score for international students as decided by the university; her IELTS overall score was 6.5 and in the reading module, she scored 7.5. Elie distinguished herself from the other participants in that she was the only one among them who practiced reading a lot. : *"I think every week, I read more than 300 pages"* (Interview 1).

Given her IELTS score and the frequency of her reading practice, I was surprised with her performance during the TAP text reading and the interview for several reasons. Firstly, the TAP article discussed a generally well-known topic (the Israeli-Palestinian conflict) with which she was likely to have been familiar; however, she was unable to summarise some of the paragraphs. She reported that she needed to read it another time if she was to give a summary. Upon asking her to summarise one paragraph, Elie said, *"Actually, I understand each word, I think it is easy but if you want me to give some ideas about this paragraph, I think I need a second read"* (Interview 1).

Secondly, Elie was unable to answer some questions in the interview, as she indicated that she would be able to answer these questions in Chinese but not in English. When asked if she thought that academic reading was challenging because of the high level of skill required, Elie replied, *"Yes, actually I can answer this question in Chinese but in English I do not know how to express myself"* (Interview 1).

I believe that this was not a speaking problem; to me, it seemed that this came as a result of a lack of vocabulary for different reasons. First, Elie was

able to articulate her difficulties and extend most of her responses to the interview questions but could not do this with certain questions. Second, during the first interview, she used her electronic dictionary to find certain words she wanted to say. Third, she reported that she translated a whole section of English text into Chinese using an electronic dictionary. It can therefore be inferred that Elie was unable to express herself in some cases due to a limited vocabulary. She also reported that her background knowledge of politics was not enough as she had completed her bachelor's degree in science. This explained why she did not perform as a highly proficient user of English, as discussed below:

Researcher: Have you found yourself unable to understand an article due to lack of background knowledge?

Elie: Yes, of course. Especially in module of the Middle East. I found I do not have any background about some articles ... if I see the name of the event, I do find some information from the internet. (Interview 1)

Regarding Elie's perception of her English language proficiency, although she scored relatively highly compared to other participants, she thought that her English was not at a high enough level to study in the UK, stating, "*I do not think my English is enough*" (Interview 1). In addition, on more than one occasion, Elie indicated that her academic tutor helped her to choose some resources to read from. She also received help and guidance in regard to being selective in reading articles in order to make the most out of them:

... I visited my tutor and she said before I start my reading, I can think more about the next week because we have to do the reading before the class. So, I can think more about next lecture and I can guess from the topic when I start my reading. I can just focus on something similar to the key words and this

will shorten the article. I just need to read the important paragraph. (Interview 1)

This indicates how conscious she was of the demands of academic reading, and how she exerted effort to overcome these difficulties.

In the second interview and TAP session, many changes were either observed through her performance or reported by her. For instance, she indicated a change in reading habits, including purpose of that reading.

In the first round of interviews, Elie read a large number of pages, and was continuing to do so at the time of the second interview. It is possible that this was responsible for the changes in reading difficulties, as she reported later that lack of vocabulary and background knowledge were not impeding her understanding of texts. This is evident in the following interview excerpt:

Researcher: Do you still find it difficult to understand some text because you lack adequate background knowledge?

Elie: I think it is better than previous time.

Researcher: Ok, can you explain on that? How has that happened?

Elie: Because last term I read a lot of things so I think I have the basics of the background. (Interview 2)

Despite these changes, Elie's perception of her English language proficiency remained as it had been. When asked whether she felt that her English was at a high enough level to study in the UK, Elie answered, "*No, I do not think so, I think I still have a large space to improve my English*" (Interview 2). She believed that the politics and international relations of the Middle East major was linguistically demanding. She added, "*actually I always think my major require a higher level than other majors*" (Interview 2).

4.1.8. Omar.

Omar was an Arabic student from Kuwait. He finished his Bachelor's in Arabic Studies, and lived in the UK for one year before he started the MA in Middle East and Islamic Studies at the Institute of Arab and Islamic Studies. Having a Bachelor's in Arabic studies enabled him to be familiar with what he was studying at master's level. Omar scored 6 in the IELTS overall and 5.5 in the reading module. When asked about his English and whether it was at a high enough level, Omar gave the following response:

No not at all, I still believe it is, actually I struggle with my English because I think for studying Master, English language should be so high, to the extent that you do not have to translate a lot and read so fast and even participate in lectures because sometimes I do not trust my English and I do not participate in lectures or I feel shy. (Interview1)

In response to a further question, Omar answered that reading some simple texts made him feel confident as he could understand them: *"Yes, it improves my confidence actually when it is easy and talks about the same thing"* (Interview 1).

Here, Omar was concerned about his performance and shyness. This also indicates an awareness of his English language proficiency and how these worries could hinder participation in class discussion. Both replies reveal that he was not confident in his English proficiency and was concerned about his performance, which resulted in being reluctant to participate in class. However, I noted that Omar was capable of articulating the reading difficulties that he encountered, and was also capable of giving extended answers to the interview questions. Although these may be indicators of his speaking rather than

comprehension abilities, he was also able to summarise most of the paragraphs that he read for the TAP report.

In one respect, Omar could be seen as having an advantage, as he largely depended on his background in Arabic to help comprehend English texts that discussed Arabic literature:

It may be because although I understand the general meaning but I have not read it in English before so this makes it a bit difficult and I could not expect how are they going to write, what words they are going to use. (Interview 1)

This demonstrates that he knew the subject matter of some modules but was not familiar with the use of English to express that content.

In the second session, Omar demonstrated a number of changes, including changes in reading habits and difficulties. One of the changes was his perception about his English language proficiency. In the first interview, Omar stated that he was struggling because of his English language proficiency, whereas in the second interview, he appeared to be more satisfied with his ability to study in the UK: *“to some extent, maybe I can study with this level of English but I do not think it is high”* (Interview 2). Omar was also able to notice and voice the change, as in the retrospective TAP he noted, *“maybe I am a bit improved in my reading because I spent the last three months reading a lot”* (Retrospective TAP 2).

Omar’s opinion of his reading skill improvement was also corroborated by his TAP performance in the second session. Nonetheless, Omar continued to show worries over his performance in class, and therefore tried to read aloud to improve his pronunciation, as students were asked by some professors to read aloud in class. When asked why he chose to read aloud, Omar responded,

“because it improves pronunciation and gives me confidence to speak English”

(Interview 2).

4.1.9. Dan.

Dan was a Malaysian student at the university. He came from a Chinese background and his mother tongue was Mandarin, but at school and in his undergraduate studies in Malaysia, he used the Malay language academically because it is the official language. Therefore, for Dan, English was a third language. He reported that he did some reading in English in psychology at undergraduate level, but Malay was the major language used in academic study. Dan moved to the UK to pursue his studies in social and organisational psychology. Among all participants, Dan had obtained the highest IELTS score, achieving 7.5 overall and 8.5 in the reading module.

Dan’s linguistic proficiency, particularly in speaking, helped him to articulate many points while he was reading the TAP text, including the difficulties that he encountered and his detailed thoughts about the text. He was also fully engaged with the text. In the pre-TAP part of the first interview, which discussed demographic details and investigated reading practices, he indicated the difficulties that he encountered in academic reading. When asked about the process that he followed when reading for academic purposes, Dan explained,

Sometimes the paper is easy, I read may be five pages and then I stop ... I read it and find it very difficult, and then I stop because I am tired. When my supervisor asked us to critique a paper, I found this very hard because just understanding is actually very tiring and taking a lot of time. (Interview 1)

Dan’s report also shows how deeply he was engaged with the text as he was reading:

Text: A broader review failed to establish reliable prevalence rates for fatigue in ambulance workers, pointing to methodological limitations such as small and non-representative samples and a lack of comparison with population norms in existing studies. I am thinking what population they talk about? Is it Australian norms or whatever their groupings? Ten percent is like one of ten workers has sickness, this is a lot. (TAP 1)

Furthermore, Dan's reactions towards the text were exceptional in the sense that he showed how he felt towards what was said in the text, and how he was emotionally engaged with it. This emotional reaction to the text appeared not only in the concurrent TAP report and the comments that he gave but also in the retrospective report:

I think my main problem is that a lot of terms are used, they mention stress and stressor and then all of these terms and some more. To me, it is like there is reference sample and community sample and I still have question mark whether I can understand. Then maybe it is my feelings I feel sad on the report, that a lot of those who help as paramedic ambulance they suffer health issues. So I feel sad then at a specific point have to stop for a while (Retrospective TAP 1).

Dan showed a further level of engagement when he was reading the TAP text; the findings suggested that ambulance paramedics' shifts place them at risk of fatigue and depression, regardless of age and gender. Dan commented, "So I am thinking; what age do you mean so I will flip to the participants and see" (TAP 1). He continued to move back and forth between pages, trying his best to understand the text. In addition, the first interview conducted with him was approximately two months after he started the academic programme, which meant that he had already spent considerable time doing academic work. Dan also talked about the improvement in his

performance and indicated more than once how things had changed: *“When we critique the paper, for me, I was just listening and I did not know what the class was talking about. I understand 20% of it. But through these three months I can see some improvement”* (Interview 1).

However, despite his high level of engagement, Dan said that reading was very tedious and tiring. Before we ended the TAP report, he commented that he was tired (at that point the TAP had not taken more than 17 minutes in total) and asked to stop reading, wanting instead to go to drink something or walk around. He also reported that he would usually take breaks while reading to manage this.

Dan’s second interview was held approximately two months later. Like the other participants, Dan showed changes in various aspects including reading practices, difficulties and strategies. Although Dan told me that he had received a distinction in two modules, he was unsure of his proficiency, and in response to the question of whether it would enable him to operate successfully at the university, he replied, *“Successfully? 70%”* (Interview 2).

While Dan was emotion-focused when voicing thoughts about the text in the first TAP session, in the second, he demonstrated a different kind of engagement. Throughout his reading performance, he showed a deeper level of criticality, as he was focused on what to read and what to skip:

... and then I go to the methods because it is a questionnaire, I would check the reliability. It is a good one! This is how I read now ... so it is a big difference from last time. Last time I will be like (inaudible) in the statistics tables now it is like I will look at the coefficient and it is .90 to .95 and that is good. And then I will jump to discussion part. (TAP 2)

This illustrates that in comprehending the reading text, Dan was able to understand more than the literal meaning and engage critically.

4.2. Reading Practices

The reading practices part of the interview asked about the frequency of academic reading; the average number of pages that students read per week for academic purposes; whether they followed a specific process to read a particular text; what sources they read from; how they decided what to read; and whether they could keep up with reading loads.

4.2.1. Differences in participants' reading frequency and number of pages they read.

As expected, the results in Table 4 demonstrate that the nine participants varied considerably in terms of their reading frequency and the number of pages that they read each week.

Table 4

Frequency of reading and average number of pages read per week

| Participants | Number of times he/she read per week | | Average number of pages read per week | |
|--------------|--------------------------------------|-----------------------|---------------------------------------|------------------|
| | First interview | Second interview | First interview | Second Interview |
| Reem | 3 | >3 | 5 to 10 | 10 to 15 |
| Amy | Everyday | Everyday | 350 | >100 |
| Sandy | 2 to 3 | Everyday | 15 | 20 |
| Sara | 3 | Sometimes more than 3 | 24 | 100 |
| Nora | 3 | <3 | 10 to 20 | 20 |
| Sam | 0 | 5 (4 hours in total) | 0 | 50 |
| Elie | Everyday | Everyday | >300 | >300 |
| Omar | Everyday | Everyday | <30 | <30 |
| Dan | Everyday | Everyday | 50 to 70 | 200-400 |

The differences seen in Table 4 may be attributable to the initial differences in participants' linguistic proficiency, and other factors such as

differences in motivation, discipline and requirements. Although some participants indicated a high number of times per week that they read for academic purposes, these figures are striking when compared to the number of pages that they read. The number of pages read was very small compared to the times that they reported reading, which could indicate how difficult and tedious reading was for them. For example, when Omar was asked about reading no more than 30 pages, he answered, *"Yes, because it takes long time"* (Interview 1).

The discrepancy could also be interpreted as a result of not being proficient readers who can apply reading strategies. To illustrate this, Reem read three times a week for academic purposes, but read only between five and ten pages per week, a trend that was similar for other participants. Nora stated, *"... let us say ten pages maximum, I am sure it does not reach twenty"* (Interview 1). Although Dan mentioned that he read every day, he reported reading only between 50 and 70 pages per week. This is in line with what some students reported, in that they needed to read and reread the same text many times in order to understand it. As a result, they were not able to read many pages. However, Sam was the only participant who stated that he did not read for academic purposes at all: *"It is difficult for me to answer this question because I have to read but I do not read!"* (Interview 1).

It was indicated in Sam's profile that this was not only because academic reading was difficult for him, but also a result of lack of motivation. In contrast, only two participants reported that they both read a large number of pages and frequently read during the week. For instance, Amy was one of the students who read an average number of three articles a day, ending with approximately 50 pages a day: *"I read like three journal articles a day ... It depends on the*

article if it is easy to follow or not ... so it is like 50 pages a day" (Interview 1).

This number is far more than the total number of pages that other participants reported reading in a week. However, Amy's reading ability, compared to other participants, was not reflected clearly in the IELTS because she scored 6.5 and 7 in her overall score and reading score, respectively. Some other participants scored similarly or even higher, but read fewer pages; this could be attributed to Amy being familiar with reading English texts because she was a student who held a BA in English education (TESOL). As such, she spent a great deal of time studying in Indonesia using English as a medium of instruction; this made her more fortunate than the others, who had only just started studying using English as a medium of instruction.

Similarly, Elie reported that she read every day, reading a total of approximately 300 pages per week. *"I think every week I read more than 300 pages,"* (Interview 1).

She explained that her lifestyle was the cause for her being able to read at this level: *"... every day I just go the modules and then go back to my room and keep reading"* (Interview 1).

As expected, over time, some of the students reported a change in their reading habits, including frequency of reading and the amount of reading that they did in a week, while others remained as they were. Sara, Sam and Dan reported a substantial change in their reading habits.

4.2.2. Divergence between reported data in the interviews and observed data in the TAP report regarding the process of reading.

This section discusses the way in which students described their reading process for academic texts, and how this was not borne out in their actual reading practice in the TAP session. The interview questions aimed to elucidate the process that they followed when they read, and whether they applied reading strategies when reading for academic purposes. As it is a process, it naturally varies between different people, so I decided to include all students' experiences with academic reading. Table 5 illustrates how they approached academic texts.

Table 5

How participants described their processes of reading for academic purposes

| Participant/ interview no. | Academic reading process |
|---|--|
| Reem/1 | <i>"First I read the title, then the abstract to make sure if it is relevant to my subject or not, then I select what I need to read. I do not read the whole passage."</i> |
| Amy/1 | <i>"First I read the title and the abstract if there is one ... if there is no abstract I will read the introduction. If I was like find something difficult I just go to the conclusion, because I want to challenge myself that okay without reading the conclusion I can understand what the article says."</i> |
| Sandy/1 | <i>"I will read the title I think it is the most important thing, then I look at the reference and I notice the journal and the author of the article. I think the reference can give some information about the topic. Besides, If I do not understand the article I can go to the reference to find other article to help me understand the original article."</i> |
| Sara/1 | <i>"... I find if I do not understand the title, I look at the dictionary, then I keep reading until the last. If I do not understand the meaning I look at the dictionary."</i> |
| Nora/1 | <i>"I look at the title and then read the abstract and also some subtitles ... then consider the author and read it that is all."</i> |
| Sam/ 1 | <i>"I will read the title, the author and then I start reading."</i> |

| | |
|--------|--|
| Elie/1 | <i>"I first read the title and then the introduction and conclusion."</i> |
| Omar/1 | <i>"I find the length of the article, first of all, how many pages ... then I start to see subheading just to have an overall idea, then I begin to read each paragraph and I will skip the paragraphs I believe they are not so important."</i> |
| Dan/1 | <i>"I will read then I check the meaning of the words, then for lots of time I will stop and think in Mandarin about the meaning of it, then I will reread it."</i> |

These processes of reading indicate that the students showed different levels of awareness regarding what to read from the texts. Some explained that they applied strategies when reading for academic purposes. For example, Omar and Nora reported that they previewed the text before they read it, while Reem, Amy and Elie described being selective and choosing what was important to them. However, the observed data during the TAP session does not corroborate what they mentioned about being selective in reading specific parts of academic texts or in the application of pre-reading skills such as previewing the text. All were involved in reading right from the start of the articles or book chapters. This divergence between the reported and observed data of some participants can be attributed to their feeling that the TAP session did not resemble a normal context in which they could choose what to skip, what to focus on, and what to look for. However, I assured them that they should read exactly as if they were reading for academic purposes. Another explanation could be the absence of a specific task that the participants needed to keep in mind and respond to while reading, which would normally result in being selective and reading only to address that task, but not in the case of the TAP session.

In contrast, Dan, Sam and Sara reported that they would read the text fully from beginning to end, and did the same in the TAP sessions. Like the other participants, the absence of pre-reading strategies was noticed.

In the second interviews, Elie, Omar and Reem reported that they read in the same way mentioned in Table 8 whereas Amy, Sandy, Sara, Nora, Sam and Dan reported that they had changed their process of reading. Table 6 shows these reported changes.

Table 6

Reported changes of reading processes

| Participants' name/ Interview | Academic reading process |
|----------------------------------|---|
| Amy/2 | <i>"The first thing I go to the aim of the journal article the abstract ... I will straightaway go to the part that I need, that is important for me, and ... conclusion."</i> |
| Sandy/2 | <i>"... I do not read the reference list ... I read the title, the abstract, and I read parts I mean for example the introduction, I will read the whole introduction and literature review just every first sentence and last sentence ... I will read just ... according to what I need."</i> |
| Sara/2 | <i>"No, I am only skimming."</i> |
| Nora/2 | <i>"...Recently I do not go through the subtitles, I just read the abstract and then the conclusion and then I will go to the discussion and skip the details."</i> |
| Sam/2 | <i>"I do not translate to French ... I mean I have no particular way of reading. I just read."</i> |
| Dan/2 | <i>"Yeah, I think thinking in Mandarin decreases a bit, more thinking in English. But you taught me to speak aloud so when I read and there is a lot of different concepts, I take notes and then I will read it aloud so that it helped me clarify."</i> |

Table 6 illustrates that some participants reported changing their reading process, while others believed that they read in the same way. Apart from Dan

and Nora who demonstrated a change in their TAP reading performance, all other participants showed divergence between their reported and observed data. Despite reporting that they had changed their way of approaching academic texts, for most participants this change was not evident in their TAP sessions. For example, Nora read the abstract and then skipped the introduction and moved to read the methodology section of the TAP article. Therefore, she did not do exactly as she claimed she would, but nonetheless applied strategies, as she was selective in her reading, trying to skip what she found to be unnecessary details. Similarly, Dan, who demonstrated a substantial change in TAP reading by being deeply engaged with the text, was not able to capture that whole change in the interview responses, though his reading performance was close to the description. Therefore, Nora and Dan were both consciously applying metacognitive strategies while they read that enabled them to monitor their comprehension.

4.2.3. Reading was driven by assignment.

For each module that students take at postgraduate level, they are given a core reading list with some suggested resources in each module handbook. With some modules, a suggested reading list is given for each lecture or assignment, and students must choose from these different resources. The participants unanimously chose to be guided by such a reading list; however, these reading lists are usually not exhaustive. They may cover the main topics that students must cover, but students may also need to consult other resources. Students' dependence solely on the suggested reading can be an indication that they prefer being told what to read. Apart from Sara, who reported that she read to familiarise herself with research areas, all other participants' readings were guided by assignments, explaining why they would

rely on suggested reading lists to tackle certain tasks. This is evident in the following comments from participants:

“... I have read a lot of communicative language teaching from reading list ... it is all from my tutors they provided on ELE”
(Amy, Interview 1)

“... I will choose only what the lecturer recommends” (Sandy, Interview 1).

“The lecturer chooses the journal and we must read it” (Dan, Interview 1).

Sam (the only undergraduate student) said that he would not depend on the list and would search for other resources to read. Although Sam reported that he did not read at all, in this answer he anticipated that he would do so in future.

In the second round of interviews, the purpose of reading had changed for some participants. Reem, Omar, Amy, Elie and Dan discussed other motives for reading, e.g. familiarising themselves with different research areas and working on proposals for PhDs. In effect, reading was not exclusive to suggested reading lists, but had been expanded to include personally chosen resources, as seen in the following responses from the second interviews:

Reem: No, I read in different subjects ... for my dissertation, and a proposal for PhD.

Omar: All my reading are almost for my assignments but now I start to read other topics in my major just to improve level of my English to be familiar with some new terms that I do not know.

Amy: ... sometimes I go to the references from the journals and if I find that is relevant to my writing then I will try to find it.

Elie: I read more because I want to apply for PhD.

Dan: I can say that the 200-400 pages half of it because of my assignments and half of it is like my research project.....then

the other things like interest me though I read about them as well but not much and something is for interest.

4.2.4. Ability to handle reading material.

Most participants reported that they could not handle their reading loads. They attributed this to the length of their reading lists. Omar commented, “... *not only the time because it is long and I am slow but also it is hard to understand*” (Interview 1). Nora also stated, “... *it is too much for me, I mean like sometimes I feel tired of reading things I do not know where it is heading to*” (Interview 1).

Additionally, participants reported that they read a single text many times, which naturally increased the time needed to finish their long reading lists. For example, Sandy explained, “*Actually some important articles, I will read at least twice and the first time I read one by one ... I spend a lot of time to read*” (Interview 1).

It is therefore evident that being unable to read efficiently or finish reading in a reasonable time posed challenges for the students. Most participants reported that they selected only some items from their reading list. Selection was usually based on the relevance of the article to the topic that they wanted to read about. In addition, some reported other criteria for choosing their resources and helping them to handle reading large amounts of material, including reading what they found simpler or more interesting, or even the most recently published work. This is explained further in the following comments from the first interviews:

Reem: ... the more relevant articles, I will read them deeply.

Amy: Because lots of courses I have to read for them all. If in the CLT they gave me 15 journal articles and I did not read them all. I read like seven of them not all ... I will choose the most high priority ones and which one is very important to bring

in the discussion, the other just like skimming not really reading details.

Sandy: ... Maybe I choose the easiest one or the article that I am interested in.

Nora: I look at the abstract and the title if it is really connected to the topic I want to explore more, I will read it deeply.

Dan: ... I will prefer something like 2005 and onwards and sometimes I ask my supervisor which author to read, and my friends and class mates. Then usually it is like I will look at it and then if I can understand the journal, if it is too difficult, I will just put it aside.

Elie: I have a class named Western Civilization, the lecturer always gives us a very long reading list, for me they are very long and the lecturer does not give us really important articles, so I will check them by year, most of the time I will read the latest.

Participants also tried to find ways to handle their reading load through the help and guidance of their academic tutors. Elie indicated that the support offered by her academic tutor helped her to be selective and decide what to read from the given articles:

... actually in the first two weeks I do not know what the tutor wants me to find in the reading so it really takes me long time to read every page but at the end of the second week, I visited my tutor and he said before I start my reading I can think more about the next week because we have to do the reading before the class so I can think more about next lecture and think and I can guess from the topic. When I start my reading I can just focus on something similar to the key words it will shorten the article. I just need to important paragraph to read. Not every paragraph. (Interview 1)

Being selective is a strategy adopted at the micro level, where these students indicated that they did not read a whole article or book chapter; instead, they selected some parts and focused on them. This demonstrates that

they applied a strategy to read what they believed was going to be relevant. Elie developed this skill after a meeting with her academic tutor. She reported that she was reading without being oriented to its purpose, and was advised to choose paragraphs and focus on them. Such practice was also reported by other participants, such as Reem, who commented, *“I will read the abstract and the subtitles, introduction, and conclusion”* (Interview 1). Sara similarly said, *“... because it is going to take a long time, yeah, I will read the abstracts or may be from the table of contents I can find what I am going to look for”* (Interview 1).

In addition to being selective with their reading material, an emergent finding indicated that course reading was substituted by the PowerPoint slides that were prepared and uploaded prior to the lecture on the Electronic Learning Environment. Reem was unable to read the whole required list, saying, *“No, not the whole list, just the power point slides of the lecture not the reading list. I select of them”* (Interview 1).

PowerPoint slides of the students' lectures may frame the main topics that are discussed; however, they may not always be a suitable substitute for reading from other resources. I believe that participants chose to read them instead of their suggested reading lists because they introduce simple content and are written in bullet point format. It is therefore easier to obtain the overall meaning in a short time.

Finally, it is important to note that there were two participants who indicated that they read all the time, and were capable of reading everything that they were set, though they reported being selective in terms of which part of the article or book they would read. Elie mentioned that she was selective in terms of which paragraph to read, but did read every day all material she planned to read; therefore, she could finish about 300 pages a week, which was

also aided by her lifestyle. Sara was the second participant who indicated that she could read the relevant material in advance. She was also the only participant who read to familiarise herself with the research area.

4.2.5. Sources of reading material.

Sources of reading material can come in the form of printed material, soft copies of books, or journal articles. I expected the students to prefer reading books, as they were all Master's students except one. When the first round of interviews were conducted, the students were all at the stage of familiarising themselves with their respective majors. Books are the sources of basic information for an area of study, as they introduce fundamental details about a given topic, whereas journal articles tend to discuss issues in detail. However, for the participants in this study, journals articles were the most preferred source of information for a number of reasons. Firstly, they considered journal articles a more reliable resource, as suggested by Reem. Sandy also explained: *"I usually read from journals, because I think for the websites, we cannot believe in the data ... yeah and for the books maybe as a beginner I prefer to choose something easier for us to read whether books or journals"*. (Interview 1)

Secondly, the students tended to adhere to their preferred learning style of reading online rather than printed material: *"... I prefer to read from the computer screen"* (Nora, Interview 1). Finally, participants reported that it was easier and faster to research specific articles than search for books: *"... textbooks are like more comprehensive, the text book is 600+ pages so I search journals according to specific themes because that will be faster"* (Dan, Interview 1).

Both Reem and Sandy attributed the preference for journal articles over websites to the articles' reliability, indicating an awareness of academic reading and the importance of the source of texts. Nora demonstrated this awareness by stating that she preferred articles because they provide better arguments: "... *it also provides better argument because journals usually have been revised many times so it is like more reliable*" (Nora, Interview 1).

On the other hand, there were some participants who believed that hard copies of books or journals were better for them because they helped them to concentrate. For example, Amy preferred to read books in hard copies in order to meet her learning style: "*I get like very difficult to concentrate and get the meaning if I read from computer, but from the book it is okay*" (Interview 1). Similarly, Elie also preferred to read books or journals in hard copies, as this enabled her to write notes:

... it is because I can write some notes, I think it is really helpful for me to find some important parts and when I reread the article I can remember what I have got from it but if I just read it on websites it is difficult to make some notes. (Interview 1)

In contrast, Dan mentioned that he chose to use websites because he could find the information visualised in pictures: "*I actually prefer websites because I understand with pictures*" (Interview 1). Omar preferred to read online because of the easy accessibility of resources: "*I prefer websites but the academic ones ... because I cannot bother searching in library shelves*" (Interview 1).

Discrepancies in participants' preferences for sources of reading material demonstrate different levels of awareness of what to read. Some expressed that they were fully aware that it was a matter of preference to go for electronic

copies of journals or hard copies of books, while one of the participants explained that she believed the material content to be important whether it was in soft or hard copy. The following is an example:

Sara: either journals or books, I like both. It does not matter.

Researcher: does it depend on the content?

Sara: yeah.

In the second round of interviews, no change in regard to preference of reading sources was found, except for Omar, who had added books to the online resources when reading for assignments.

4.3. Students' Perceptions about Academic Reading

In the first phase, the participants' perceptions about academic reading were elicited through their answers to questions about its effects on different components of their linguistic abilities, such as vocabulary, knowledge and writing. The participants' responses showed that they believed academic reading to be beneficial to their vocabulary knowledge. Academic reading works as input of new vocabulary in context and, as they indicated in the first interview, this helped them to acquire new vocabulary that they used in their assignments:

Sara: Yes, it does because I have to check any word I do not understand.

Sam: ... because I see complex words and search them so I will progressively acquire vocabulary.

Sandy: Yeah, of course because I always read articles in special education needs and through this I can learn some specific words and some other words I use in academic articles, the more I read, the more I know.

Dan: Yes, for example before September I do not know the meaning of 'prevalence'. In September and October, ten journals I read two or three will have prevalence. I will check and it means wide spread. Then if I see that word I know it means wide spread.

During the TAP, Omar showed evidence of how academic reading was rewarding for him, as he found some words in the text that he had just learned. On reading the sentence, '*... they made the episodes revolve around two main characters,*' Omar commented, "*revolve around* is a new expression I have just learnt and that as I told you make it easier for me if I read ... yeah 'a gullible narrator', 'clever eloquent rogue', this is new vocabulary I have just learnt" (TAP 1).

However, this was not the case with all the participants. Nora thought that academic reading had been influential in helping her to acquire one aspect of vocabulary, stating, "*I am not sure, I do not think it improves. I think it improves in terms of receptive vocabulary but not my productive one*" (Interview 2).

Nora here touched upon an important issue regarding lexical acquisition. She was aware that knowing a word does not simply mean that you can give the definition of it. There are types of word knowledge that a language user must master in order to say that he/she knows that word. Lexical acquisition as Schmitt (2004) describes it is incremental, meaning that even this stage of acquiring vocabulary receptively is considered a phase that feeds into acquiring vocabulary productively. Therefore, Nora's vocabulary had been affected by academic reading, but, because the change was gradual, she thought that it had not happened.

At times, a lack of vocabulary made it necessary for students to translate material from L1 to English when they were writing. Academic reading helped them gain the vocabulary resources to write directly in English. It was perceived as helpful to minimize the ramifications of lacking vocabulary knowledge. The following quote from Reem is an example of this:

because sometimes when I want to write I translate (from L1 to English), and translation from Arabic to English is very terrible and it is not English! Sometimes when I read journal article, I highlight some vocabulary to use them in my assignment.
(Interview 1)

When they were first interviewed, Reem and Elie discussed what can be described as a lack of vocabulary knowledge. Elie commented, *“Actually, when I write my first essay I have to write what I want to say in Chinese first and then translate it into English”* (Interview 1). Elie’s comment indicates that some ESL students write what they want to say in L1 and then translate the whole sentence or paragraph into English. This method does not seem to be efficient, as some syntactic constructions and colloquial word choices may be used improperly, and this is exactly what Reem described as *“very terrible and simply not English”*. However, she found herself using this approach because she lacked sufficient vocabulary. In order to overcome this, she found academic reading helpful in supplying her with the needed vocabulary that would enable her to express her ideas accurately; therefore, academic reading can help to improve students’ vocabulary, which contributes towards enhancement of their overall linguistic proficiency.

Participants also observed that the repetition of some vocabulary helped them to acquire more words, as Amy noted:

... because the vocabulary appears in one paragraph and then just I find it in some other paragraphs, so I just try to find its meaning and then because it is in all sections of the book okay I know this vocabulary. (Interview 1)

The participants' perceptions also indicated that academic reading improved vocabulary knowledge, and that this contributed to enhancing participants' writing skills, as Sara explained: "*... because in reading, there is vocabulary and it will affect what we are going to write based on our reading*" (Interview 2).

In addition, academic reading introduces academic knowledge, and therefore inspires students to generate ideas to write about. This was clear in Amy's response:

... for example, the first day the tutor gave me the assignments of communicative language teaching (CLT), I did not know anything about CLT, and then I started reading ... and then the ideas just came up and I knew what to write" (Interview 1).

Participants also utilised reading texts as a model for writing, in the sense that they would consider the rhetorical structure of academic articles and how authors approached the topic, resulting in them being affected by such an approach. Therefore, academic reading does not merely function as input to enrich students' vocabulary and academic knowledge, but also helps students to determine how to approach topics in their essays, both at the micro and macro levels. At the micro level, students can make use of the syntactic construction of an article's sentences as examples of how to build their own sentences. At the macro level, they pay attention to the article's rhetorical organisation and try to manipulate it in their writing. Reem discussed her use of both techniques:

Sometimes when I read, I take the approach to help me to write. For example, when looking at some article methodology, they give definition of special education in different countries. I put in my assignment the definition of special education in Saudi Arabia. I use some vocabulary and sometimes also the grammar. (Interview 1)

Nora expressed similar ideas, stating, “... *I feel like I follow some patterns like the way to open a new idea, the way to conclude and how to connect the ideas and put references. I think yes I learn a lot from reading*” (Interview 1).

These extracts reveal that some participants used the genre analysis technique, meaning that students were aware of the rhetorical organisation of the text and took it as a model to copy in their writing (Hiverla, 2016). Therefore, they read a given text to both acquire academic knowledge and mimic its rhetorical organisation to develop their writing.

From the participants’ perspectives, reading speed was connected to the effect of academic reading on vocabulary acquisition, though the participants were different in their perceptions. The students who were in favour of academic reading had found that, as they practised reading, they acquired more vocabulary and their reading speed increased. In the first interview, Reem noted, “*At the beginning I feel that I am a little bit slow,*” but later added, “*Yeah, because I do not understand a lot of vocabulary I am slow reader, but when I read and understand a lot of vocabulary then I will read faster*”. Sandy similarly noticed an improvement with practice: “... *after spending three weeks, when I read something ... I read it much easier than before*” (Interview 1). This was echoed by Omar, who said, “*Yeah, the more I read, the less I need to use a dictionary while reading*” (Interview 1). However, Amy thought that there were other facilitative factors that had helped to increase her reading speed: “... *I*

think also because I always use English when I speak with my friends, so when I listen to English almost all the time, I think when I speak or when I read it can be faster than before” (Interview 2). Therefore, it can be inferred that after students begin their academic programmes and engage in work related to their degree course, their English language proficiency improves.

4.4. My English Language Proficiency: Not High but Enough

In the first stage, the students were asked two questions regarding their perceptions of their linguistic abilities. The first asked whether they thought that their English was at a high enough level to study in the UK when they first started their academic programmes. The second was more specific, as it asked if, despite all the challenges that they mentioned, they thought that they would be able to cope and operate successfully at university. Before presenting the students’ responses in this regard, their IELTS overall scores and reading scores are given in Table 7, in order to understand how their perceptions of their linguistic abilities compared to the IELTS scores they achieved. This is also important to consider if we are to assess the extent to which they experience problems when they read for academic purposes.

Table 7

First phase participants' IELTS scores

| Participants /scores | Reem | Amy | Sandy | Sara | Nora | Sam | Elie | Omar | Dan |
|-------------------------------|------|-----|-------|------|------|-----|------|------|-----|
| IELTS overall score | 5.5 | 6.5 | 6 | 6 | 7 | 6 | 6.5 | 6 | 7.5 |
| Reading module score in IELTS | 6 | 7 | 6.5 | 6 | 7 | 6.5 | 7.5 | 5.5 | 8.5 |

On a continuum, with one end indicating full satisfaction in their English language proficiency and the other indicating scepticism of their proficiency,

most of the participants' responses tended towards scepticism, suggesting that they believed their English abilities to be insufficient to study in the UK. During their time in their respective academic programmes, ranging from three weeks to two months, they seemed to become aware of the study requirements, whether linguistic proficiency level or other skills needed to operate successfully in academic life. For example, Nora, who achieved the second highest score of all participants and above the required IELTS score, was not confident in her linguistic proficiency, and she did not feel that her English language proficiency would enable her to catch up in a different education system:

I am not sure about that. I am not quite confident. I am afraid that I may not be able to catch up with this education system here in UK. My IELTS results show that I may be good enough and it somehow gives me like a kind of support or encouragement that you can do this! But still I feel like a bit unconfident! (Interview 1)

Similarly, Elie achieved the required IELTS score for her programme but doubted her English language proficiency: "... *I do not think my English is enough*" (Interview 1).

Referring to Table 10, which shows the students' IELTS scores, it is surprising that some participants who did not believe in their linguistic abilities had either achieved or exceeded the minimum level of English language that was required by the university, as they are supposed to be working in an area within their linguistic abilities. Dan, for instance, who had exceeded the required score by the university, still believed that he did not possess the required English language skills that would allow him to study successfully. Although he achieved the highest score among all the participants, Dan thought that he still needed to improve his English language proficiency:

No ... I noticed in class discussion some British classmates speak very fast so to me it is like I need to listen then I need to translate and when I need to talk I need to translate from Mandarin to English and then I share. (Interview 1)

Reflecting on his English language proficiency, he mentioned here that he was unable to comprehend his classmates' input in discussions, which could be considered a result of unfamiliarity with the English dialect, and the inability to process others' input simultaneously. He therefore attempted what can be described as 'translanguaging' to Mandarin to make sense of what he listened to or read, deciding what he wanted to say in Mandarin, and eventually translating it into English. This could therefore explain the vast distance between Dan's performance in the IELTS, in which he scored very highly, and his real performance in academic life, which he perceives as challenging and beyond his capabilities.

In contrast, one student's response was closer to the other end of the continuum. Amy seemed confident in her linguistic proficiency; however, she was not the participant who scored most highly. Regarding her perception of proficiency, Amy stated, *"Yeah, it is not really low. My English is not really bad"* (Interview 1).

Therefore, it is evident that students differed in how they perceived their English proficiency, regardless of their IELTS score. While some believed that it was a reassuring factor that boosted their confidence in coping with academic difficulties, others were not so satisfied with what they had achieved in the IELTS, and were uncertain of its ability to indicate a student's capacity to succeed. Participants who had not achieved the required level of English language in the IELTS were admitted to the pre-session English for academic purposes course prior to the start of the programme, but it was expected that

they would not be confident in their linguistic abilities. For instance, Reem had finished a pre-sessional English for academic purposes course, as she was unable to achieve the required score in the IELTS, and was not satisfied with her English proficiency. When asked whether she thought that her English was at a high enough level at the start of the course, Reem answered, “*No, absolutely not ... My language is just ... I can study with double challenge*” (Interview 1). She was fully aware of the demands of studying in the UK and already anticipated at this early point in the term (third week of the first term) the difficulties that she was going to face.

Sandy also attended a pre-sessional course, as she was unable to achieve the required score in the IELTS, as discussed in the following excerpt from her first interview:

Sandy: I think you know, for us as international students, we come here to study and we just need IELTS test. Chinese people are good at tests, you may know that in China we have some courses to attend and then they give you some ...

Researcher: Strategies?

Sandy: Yeah, to improve your score, your knowledge is still low. So that is just for the test.

It can be inferred that she thought that her score was not an indication of having good command over the English language, and that in reality this score would not guarantee the ability to tackle the academic requirements without being faced with challenges. This sheds light on how they perceived the validity of the IELTS, and the distance between students’ performance in that test and the challenges that they may face in academic life.

In the second phase, respondents’ perceptions about their English language proficiency was also investigated. Before presenting these findings,

respondents' scores in the overall IELTS and in the reading module are presented in Figure 5 and 6.

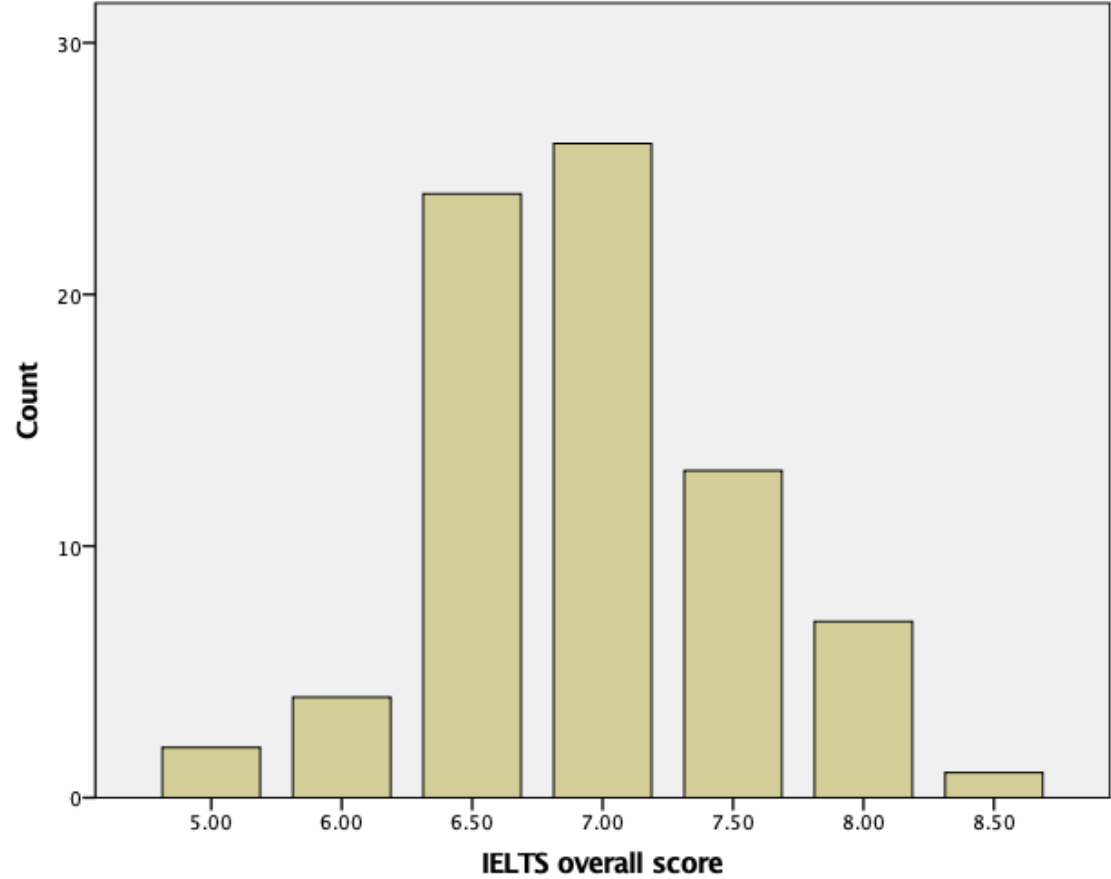


Figure 5. Second phase participants' IELTS overall score

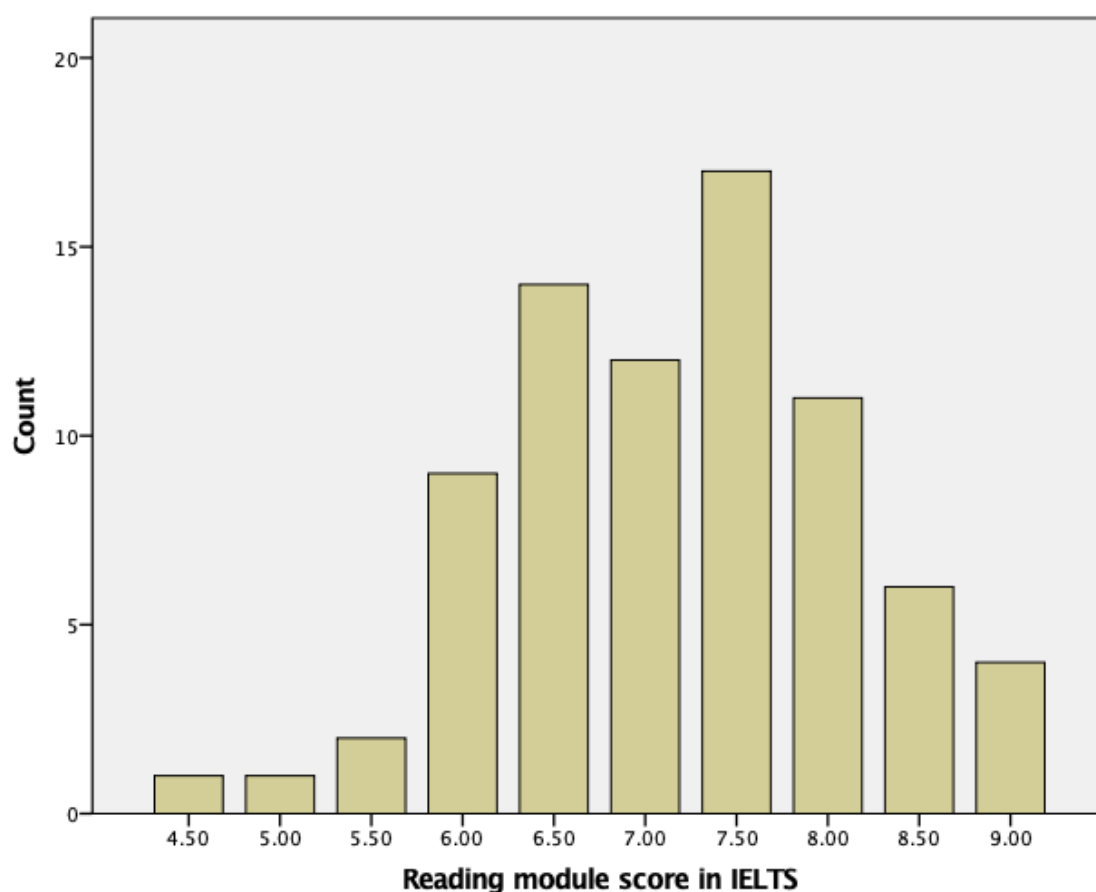


Figure 6. Second phase participants' reading module score in IELTS

As Figure 5 shows, survey respondents' overall IELTS scores lay between 5 and 8.5, whereas Figure 6 shows their reading modules scores that lay between 4.5 and 9.

Regarding participants' perceptions as indicated in Table 8, 33 of the survey respondents (accounting for 42.9% of the total number of participants) selected either 'agree' or 'strongly agree' with regard to their English language proficiency not being at a high enough level when they first arrived in the UK. On the other hand, 28 participants 'disagreed' or 'strongly disagreed' with this item, accounting for 36.4% of the total number of participants. Respondents who were dissatisfied with their English language proficiency outnumbered those who were satisfied. This finding corroborates the finding of the first phase

of the study, where most participants showed scepticism about their English language proficiency when they first arrived in the UK.

Table 8

Students' perceptions of their English language proficiency when they first arrived in the UK

When I first came to the UK, I felt that my English proficiency was not at a high enough level to study in the UK

| Responses | Frequency | Percentage |
|----------------------------|-----------|------------|
| Strongly disagree | 8 | 10.4 |
| Disagree | 20 | 26.0 |
| Neither agree nor disagree | 16 | 20.8 |
| Agree | 24 | 31.2 |
| strongly agree | 9 | 11.7 |
| Total | 77 | 100.0 |

Students' perceptions about English language proficiency and whether it would enable them to operate successfully were also investigated. Despite not being confident about their linguistic proficiency in English, the first phase participants generally fell into two groups regarding their perceptions about their performance and whether they would be able to cope with reading difficulties and operate successfully at the university. Most were optimistic and thought that they would be able to cope with these difficulties. Their awareness of study demands was also apparent when they indicated what they had to do in order to achieve their goals. Responses were indicative of willingness and determination to achieve their goals. In addition, participants also shed light on the effects of time; as time passed, they became familiar with the academic requirements and this eventually enhanced their abilities and reduced the challenges, as seen in the following responses from the first interview:

Reem: Yeah, I think so. There are some challenges but students can understand and study and have a good score.

Amy: Well, at the first week, it was very difficult for me. Now I found it is easier to learn and I believe in future it is going to be easier.

Sandy: Yeah I think after practice I will be able to do that.

Sara: If I keep learning, I think so, but if not, I do not think that.

Nora: For this level, I am not really sure, but I am sure I will be able to do so. For now I feel more and more practice. I believe the more I read the better I can understand. Although it is not certain for me but I believe I can.

Elie: Yes, if I overcome the problems I mentioned. I think I can and will be able to read articles more quickly, more effectively and I will find it easier to read and write my essays.

Omar: Yeah, I think it will be easy as I said it needs time and working hard.

Surprisingly, Dan was unsure of his English proficiency and whether it would enable him to operate successfully at university, appearing to be somewhat pessimistic. Dan was not sure that he would achieve the average he planned to get in the modules: *"I do not know ... if I do not get above 5 in modules, I think I am going to prepare to go to Malaysia because I will be very honest with my limitations"* (Interview 1).

In the second round of interviews, some participants demonstrated slight changes in their perceptions of their English language proficiency. Reem, Nora and Omar, when asked in the second interview, were somewhat satisfied and believed that their linguistic proficiencies were sufficient to study:

Reem: Not in the high level... I think not in the high level and not in the low level, it is in between.

Nora: No, I think my English level is fine to study but not excellent one. It is fine, it is just enough.

Omar: To some extent, maybe I can study with this level of English but I do not think it is high.

Other participants' perceptions remained the same as they were in the first round of interviews. Amy showed similar confidence to what she indicated in the first interview, while Sam, Elie and Dan continued to voice scepticism about their English language proficiency.

Sara and Sandy were not very confident about their English language proficiency, but indicated that they had achieved a significant improvement. When asked whether she perceived her English to be sufficient to study in the UK, Sara responded, *"I just see that I am much improved rather than past months considering my feedback, and also I can understand the lecturers, I think I have improved but I do not know the level"* (Interview 2). Similarly, Sandy believed that her English language proficiency had changed, yet it was still insufficient: *"I do not think so. It is not enough, but maybe I think much better than before"* (Interview 2).

The second round of interviews were conducted after the participants had spent some time immersed in academic work, that is, reading for academic purposes, submitting academic assignments, and receiving feedback about their work; however, their perceptions had not changed notably. Surprisingly, even those who had received positive feedback, such as Dan and Sam, still perceived their proficiencies to be at a satisfactory level. It appeared that they still had some academic difficulties that affected their perception.

By contrast, and as Table 9 indicates, 61 of the survey respondents (79.2%) either agreed or strongly agreed at the time of completing the survey that their English language proficiency was better than when they first arrived in

the UK. Only three respondents (3.9%) either disagreed or strongly disagreed with this item. Thus, more students agreed that they felt their English language proficiency had improved over time. This was not exactly the same as what emerged in the first phase, particularly in the second round of interviews, as five participants were either of the opinion that their English language proficiency was not sufficient to study in the UK or held fragile perceptions about it. So, the majority of survey respondents believed that they had changed overtime whereas the majority of first phase respondents were not confident about their proficiencies. I believe that this divergence between first and second phase findings can be attributed to the points of time at which the two groups of respondents answered the question. The first phase respondents answered the question during the second term of the academic year, whereas the survey was sent out late in May, and was active until the end of July. I believe that a period of two months can change students' perceptions about their English language proficiency, particularly if they receive additional feedback and are involved in exerting more effort that improved their proficiency.

Table 9

Students' perceptions of their English language proficiency after they have spent time in academic study

I feel now that my English is at a better level to study in the UK.

| Responses | Frequency | Percentage |
|----------------------------|------------------|-------------------|
| Not applicable | 2 | 2.6 |
| Strongly disagree | 1 | 1.3 |
| Disagree | 2 | 2.6 |
| Neither agree nor disagree | 10 | 13.0 |
| Agree | 49 | 63.6 |
| Strongly agree | 12 | 15.6 |
| Missing | 1 | 1.3 |
| Total | 77 | 100.0 |

4.5. Academic Reading Difficulties

The participants reported encountering a wide range of difficulties while reading for academic purposes, classified as either linguistic related difficulties or non-linguistic related difficulties. Eight difficulties were pinpointed in the first stage and they are as follows:

- Lack of vocabulary knowledge
- Lack of adequate background knowledge
- Criticality as a new and significant issue
- Inability to draw the required inferences that feed into construction of mental model
- Misunderstanding the text
- Inability to understand due to distraction
- Translanguaging when reading
- Availability of books

These difficulties were included in the items of the web survey that was administered to participants afterwards. Before presenting the findings of the two phases of the study, descriptive statistics of the second phase findings are shown first. Then, the survey responses of the scale are presented as a whole in Table 11. Later, under each difficulty, findings from the two strands of data are presented.

Table 10 shows the descriptive statistics of the total perceived level of difficulty that were computed according to participants' responses to the scale. Accordingly, international postgraduate students appear to encounter a moderate level of difficulty ($M = 77.28$, $Sd = 13.13$), whereby the total can lie between the two values (0 and 115).

Table 10

Descriptive statistics of the total perceived level of difficulty

| N | Valid 73 Missing 4 |
|---------------|-------------------------------------|
| Mean | 77.28 |
| Median | 79 |
| Std.Deviation | 13.13 |
| Range | 75 |
| Minimum | 31 |
| Maximum | 106 |

Table 11 indicates the percentages of participants' responses to the perceived level of difficulty scale. They will be compared to the findings from the first phase.

Table 11

Percentages of participants' responses to the difficulty scale

| No. | The difficulties | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Not applicable |
|-----|--|----------------|------------|----------------------------|------------|-------------------|----------------|
| | | Percentage | Percentage | Percentage | Percentage | Percentage | Percentage |
| 1 | I can not handle reading large number of resources because of the complex vocabulary used in academic texts. | 7.8 | 18.2 | 27.3 | 31.2 | 14.3 | 1.3 |
| 2 | I find it difficult to be critical when I read for academic purposes. | 11.7 | 40.3 | 14.3 | 26 | 7.8 | 0 |
| 3 | Criticality in reading is a new concept with which I am not familiar. | 14.3 | 36.4 | 14.3 | 20.8 | 14.3 | 0 |
| 4 | Lack of vocabulary knowledge is the most difficult part of academic reading. | 13 | 40.3 | 10.4 | 26 | 9.1 | 0 |
| 5 | Criticality is difficult as it requires a deeper level of analysis, linking ideas and comparisons. | 29.9 | 53.2 | 10.4 | 3.9 | 2.6 | 0 |
| 6 | Unknown vocabulary affects my understanding of the text. | 7.8 | 48.1 | 24.7 | 14.3 | 5.2 | 0 |
| 7 | If there are too many unknown words, this makes it difficult for me to understand the text. | 22.1 | 54.5 | 11.7 | 3.9 | 3.9 | 1.3 |
| 8 | Most of the words I find difficult are technical. | 14.3 | 44.2 | 29.9 | 6.5 | 3.9 | 0 |
| 9 | Technical words are difficult because they are not used in daily life. | 23.4 | 53.2 | 13 | 3.9 | 5.2 | 0 |

| | | | | | | | |
|----|---|------|------|------|------|------|-----|
| 10 | If the text uses a different form of a word that I know(for example, include, inclusion, inclusiveness), I find this difficult to understand. | 2.6 | 13 | 18.2 | 48.1 | 16.9 | 0 |
| 11 | The more time I spend in the academic programme, the more I understand issues and topics in my major. | 32.5 | 59.7 | 3.9 | 0 | 0 | 2.6 |
| 12 | I can not understand statistics in academic papers. | 10.4 | 20.8 | 24.7 | 32.5 | 7.8 | 2.6 |
| 13 | I can not understand some texts because they introduce an advanced level of content. | 11.7 | 45.5 | 18.2 | 19.5 | 3.9 | 0 |
| 14 | I can not understand some texts because they introduce some cultural artefacts (contextual details). | 7.8 | 27.3 | 27.3 | 29.9 | 5.2 | 1.3 |
| 15 | I find academic papers easier to understand after listening to lecturers' explanations about the topic. | 16.9 | 53.2 | 13 | 9.1 | 3.9 | 2.6 |
| 16 | Sometimes I know the meaning of all the words but I cannot understand what the author is trying to say. | 13 | 55.8 | 10.4 | 15.6 | 3.9 | 0 |
| 17 | There is too much reading and I have no time to do it. | 20.8 | 44.2 | 20.8 | 10.4 | 2.6 | 0 |
| 18 | It is difficult to focus on reading because of distractors such as phones. | 19.5 | 42.9 | 14.3 | 16.9 | 3.9 | 1.3 |
| 19 | I find long sentences difficult to understand. | 9.1 | 37.7 | 22.1 | 24.7 | 5.2 | 0 |
| 20 | I find the English academic style difficult because it is different from the academic style I am familiar with. | 13 | 27.3 | 24.7 | 20.8 | 13 | 0 |
| 21 | I read in English and then I try to think about it using my first language. | 3.9 | 28.6 | 18.2 | 31.2 | 16.9 | 0 |

| No. | The difficulties | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Not applicable |
|-----|---|----------------|------------|----------------------------|------------|-------------------|----------------|
| | | Percentage | Percentage | Percentage | Percentage | Percentage | Percentage |
| 22 | I find it difficult to read because the core references are not available in hard copies in the university library. | 9.1 | 26 | 24.7 | 23.4 | 13 | 1.3 |
| 23 | I find it difficult to read if the scanned online books are of poor quality. | 27.3 | 50.6 | 3.9 | 6.5 | 3.9 | 5.2 |

Survey respondents were also asked about the strategies they use to overcome these difficulties. Table 12 shows the percentages of participants' responses to the use of strategies to overcome academic reading difficulties.

Table 12

Percentages of participants' responses to the strategy use items

| | The strategy | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Not applicable |
|---|---|----------------|------------|----------------------------|------------|-------------------|----------------|
| | | Percentage | Percentage | Percentage | Percentage | Percentage | Percentage |
| 1 | While reading, I skip the words I do not know the meaning of. | 6.5 | 46.8 | 16.9 | 22.1 | 3.9 | 0 |
| 2 | While reading, I skip the unknown words because subsequent sentences might explain the meaning. | 20.8 | 57.1 | 3.9 | 11.7 | 1.3 | 0 |
| 3 | If I find an unknown word while reading, I try to find the meaning in a dictionary. | 14.3 | 44.2 | 26 | 10.4 | 0 | 0 |
| 4 | I only check the meaning of unknown words if it affects my understanding. | 29.9 | 49.4 | 2.6 | 10.4 | 2.6 | 0 |
| 5 | I use an English-to-English dictionary to find the meaning of the unknown words. | 14.3 | 27.3 | 18.2 | 31.2 | 2.6 | 1.3 |
| 6 | I watch YouTube videos to understand the meaning of some key words. | 1.3 | 16.9 | 14.3 | 35.1 | 19.5 | 7.8 |
| 7 | For unknown words, I try to find the definition in English using either dictionaries or websites. | 18.2 | 57.1 | 6.5 | 9.1 | 3.9 | 0 |
| 8 | For unknown words, I try to find synonyms in English to help me understand them. | 16.9 | 53.2 | 13 | 7.8 | 2.6 | 1.3 |
| 9 | I translate the whole text into my first language using some translation websites to help me understand it. | 5.2 | 15.6 | 9.1 | 27.3 | 36.4 | 1.3 |

| | The strategy | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Not applicable |
|----|---|----------------|------------|----------------------------|------------|-------------------|----------------|
| | | Percentage | Percentage | Percentage | Percentage | Percentage | Percentage |
| 10 | I reread the text to help me comprehend it. | 19.5 | 66.2 | 7.8 | 1.3 | 0 | 0 |
| 11 | I try to find easier texts that introduce the content. | 11.7 | 51.9 | 15.6 | 7.8 | 7.8 | 0 |
| 12 | If a text is too complex I ask for help from my supervisor or classmates. | 2.6 | 22.1 | 24.7 | 29.9 | 7.8 | 7.8 |
| 13 | If a text introduces cultural artefacts, I ask for help from a native speaker. | 2.6 | 26 | 26 | 23.4 | 7.8 | 9.1 |
| 14 | If I find a topic about which I have no background knowledge, I read about it in my first language. | 5.2 | 31.2 | 19.5 | 27.3 | 10.4 | 1.3 |
| 15 | If I find a topic about which I have no background knowledge, I use YouTube to find out about it. | 3.9 | 32.5 | 16.9 | 26 | 10.4 | 5.2 |
| 16 | If I cannot understand a sentence in a reading text, I divide it into different sections to make it easier to understand. | 11.7 | 55.8 | 7.8 | 15.6 | 1.3 | 2.6 |
| 17 | If the sentence is too long and I want to understand it, I try to find the subject and the verb. | 7.8 | 51.9 | 14.3 | 14.3 | 3.9 | 2.6 |
| 18 | If there are too many numbers and names, I just skip these details and focus on the words. | 10.4 | 54.5 | 15.6 | 11.7 | 1.3 | 1.3 |

| | The strategy | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Not applicable |
|----|---|----------------|------------|----------------------------|------------|-------------------|----------------|
| | | Percentage | Percentage | Percentage | Percentage | Percentage | Percentage |
| 19 | I write some notes so that I do not forget what I have read. | 28.6 | 48.1 | 13 | 3.9 | 1.3 | 0 |
| 20 | To understand long sentences, I highlight the important details and I reread them to make sense of the sentences. | 29.9 | 58.4 | 1.3 | 3.9 | 1.3 | 0 |
| 21 | Failing to find a connection between two things in a paragraph would motivate me to Google the connection. | 5.2 | 40.3 | 23.4 | 19.5 | 3.9 | 2.6 |

4.5.1. Lack of vocabulary knowledge.

Before discussing this difficulty, it is important to note that the participants in the first phase identified a list of words in the text as unknown. This list was not exhaustive because even in the case of words that participants thought that they knew, they may not have known the particular intended meaning of the author in the context of the text.

Regardless of their English proficiency, all participants agreed that lack of vocabulary knowledge constitutes a difficult part of reading that hinders their understanding of academic texts. In the first interview, some participants believed that unknown words caused interruption to understanding if there were too many in a paragraph:

Reem: ... when I do not understand a new word...with a lot of vocabulary like that I cannot understand, but if they are just a few words it is easy to understand.

Amy: ... well it depends, with lots of complex vocabulary, it really affects my reading, but if it is just one, two or three then it does not really affect.

Sara: I think it depends if the words appears a lot, I think it will influence my reading but if it is only like a minor word, not important word, I do not think it influences my reading.

According to the simple view of reading, in which reading is composed of two main parts multiplied by each other (word reading and comprehension), if one of these components is equal to zero, then the total of reading is zero (Oakhill, 2016). As previously stated, the participants were able to read (decode) letters into sounds, but they were unable to identify or recall the meaning of the words. Therefore, the overall process of reading was affected as the meaning was missing. At times, the students could guess the meaning and make an appropriate mental representation of the text, depending on the details mentioned, but with a number of unfamiliar words, they were unable to establish the mental model that could have helped them to represent the text in their minds, resulting in comprehension problems.

Echoing the importance of vocabulary knowledge in academic reading, many survey items focussed on it. First, only 20 respondents agreed that they cannot handle reading loads because of the complex vocabulary used, whereas 35 participants disagreed with that item and 21 were neutral. This is the only survey item that revealed that participants of the second phase did not consider lack of vocabulary knowledge as an impeding factor. There is no clear explanation for this surprising disagreement between this finding and the findings of other items about the vocabulary knowledge. Other items indicated the opposite. For instance, 41 respondents thought that lack of vocabulary

knowledge is the most difficult part of academic reading, while 27 students disagreed with that item, and eight remained neutral.

There are other items that indicated how lack of vocabulary knowledge posed a difficulty for second phase participants, and they were similar in this regard to the first phase participants. With regard to an item that stated that unknown vocabulary affects their understanding, more than half of the respondents (43 students) agreed, whereas 15 students disagreed and 19 neither agreed nor disagreed.

Furthermore, regarding the number of unknown words and whether they make it difficult to understand the text as the number increases, 59 participants agreed with this item and only six students disagreed.

In addition to considering the number of unknown words in a given sentence or paragraph that hinder the formation of a mental model, it is also essential to consider whether the unknown word is an academic or technical term. It is beneficial to look closely at some examples of words that the students in the first phase found unknown to them. It must be noted that the list of words was affected by the texts that I had chosen according to participants' respective disciplines. Logically, the list of words would have been different if I had asked the participants to read another text; therefore, it can be considered as an arbitrary list of unfamiliar words. Nonetheless, it is worth examining the words to establish whether they are academic; this may help identify what is more problematic for students. The vocabulary is listed in Table 13. A column was added to indicate each participant's subject area. The third column indicates whether the words were academic according to the academic vocabulary list of Gardner and Davies (2013). According to Gardner and Davies (2013), this list only contains high frequency, generic academic words; it does not contain

discipline-specific technical words. This explains why some words of the list from Table 13 are marked as non-academic as they are used in specific disciplines rather than across various disciplines.

Table 13

Vocabulary reported by participants as unknown

| Unknown words | Participant's major | Academic or non-academic word |
|------------------|---|-------------------------------|
| marginalized | Special education needs | academic |
| notion | | academic |
| unequivocally | | academic |
| yielding | | academic |
| unproblematic | | non-academic |
| ontological | TESOL | non-academic |
| recast | | academic |
| unobtrusive | | non-academic |
| interactionism | | non-academic |
| connectionism | | non-academic |
| envision | Special education needs | non-academic |
| notion | | academic |
| anecdotal | Technology, creativity and thinking specialism | academic |
| fashioning | | non-academic |
| capacity | TESOL | academic |
| dictogloss | | non-academic |
| fulcrum | Politics and international relations of the Middle East | non-academic |
| nucleus | | non-academic |
| profusely | Middle East and Islamic studies | non-academic |
| rostering | Social and organisational Psychology | non-academic |
| reference sample | | non-academic |
| community sample | | non-academic |
| dispatch | | non-academic |

As users of English as a second or third language, it was not surprising that the participants of the first phase did not know some of the words used in the articles, but more problematic was that some reported words are academic. They are academic in the sense that they would support students' understanding of the academic texts (Coxhead, 2000). Furthermore, some words in Table 16 can be classified as discipline-specific or technical words, e.g. 'reference sample' and 'ontological', and participants may not be able to comfortably operate in their study without being fully aware of them. This is due to the crucial effect that they have on understanding.

Elie reflected on this challenge, indicating that the difficulties that she encountered with vocabulary were because the words were not commonly used outside the context of university, making them unfamiliar to international students. She stated, "... *you know most of words in articles are difficult and very long actually in the real life we will not use them to communicate with others*" (Interview 1)

The data also showed that it is not only the breadth of vocabulary knowledge that must be demonstrated by students to enable them to read and comprehend material properly, but also the depth of vocabulary knowledge. Dan, for instance, mentioned that he had difficulty in comprehending sentences with some vocabulary that he knew the meaning of, as the sentence used a derivational form of the same stem. He knew the meaning of the stem, but was confused as to why the author of the article would use another derivational form with the same meaning as the stem. In this case, Dan was unable to distinguish between the two different meanings of derivational forms of the word stem, and therefore was unable to comprehend the paragraph: "*I felt like confused about 'stressors' and 'stress' because I thought they are the same thing ... I do not*

really understand what is the difference” (TAP 1). Omar also illustrated this difficulty when reading the TAP text:

... you can see there is some words I only know one form of them like I only know and use 'include', 'inclusion' as a noun I never used although I may understand it but the way of changing the form of the word makes it difficult for me to understand. (TAP1).

The second phase results contradicted what had been stated by Dan and Omar. With regard to the item ‘if the text uses a different form of a word that I know (for example, include, inclusion, inclusiveness) I find this difficult to understand’, 50 of the survey respondents disagreed, indicating that the use of derivations of the same stem did not make it difficult for them to understand what they meant. Only 12 students agreed, considering the use of derivation a source of difficulty. These two sources of data pointed in different directions. This can be explained by the effect of time: the first phase participants were interviewed in the first term when they had just started their programmes. On the other hand, the survey respondents responded to the survey later in the academic year after they had spent time at the university when their linguistic proficiency have improved.

A further dimension to the depth of vocabulary knowledge was demonstrated by Dan, who explained: *“Sometimes the words have like more than twenty meanings and then I got a headache” (Interview 1).* When asked about the difficulties that he encountered while reading for academic purposes, he answered:

... understanding incorrectly, like when English word has more than ten different meanings and I thought it is that meaning and after that I asked my British friends and say that it means

something else I will be like oh, ok. That makes sense.
(Interview 1)

This indicates that for Dan, it is not easy to decide which meaning of any word would be the correct one.

The results also highlighted the strategies that the students used to compensate and fill the gaps of the mental models that they tried to establish through reading. Participants were creative in finding strategies to help them to understand texts if unknown vocabulary was their source of difficulty. For some, skipping the word was the first strategy, which meant that the whole sentence or the paragraph meaning would be inferred without focusing on word-to-word translation. It must be noted that only some participants liked to do this: *“Yeah, some words I do not understand but it is like just I want to ignore”* (Sara, Interview 1).

Unlike participants who were unable to resist the desire to find out the meaning of every unknown word that they encountered, the participants who liked to apply the strategy of ignoring unknown words appeared to be reading more efficiently. Their efficiency in reading was also clear from their ability to summarise the main ideas of the paragraphs read in the TAP session. It seemed that they were trying to obtain the gist without being distracted by the unknown words. If they were able to make a mental representation of what the text conveyed, they would not stop reading because they did not know the meaning of some words. This is explained by Reem, who stated: *“... I do not understand but I will carry on ... I keep going, I will stop and translate only if I cannot understand anything”* (Interview 1). Omar said that he could find the meaning of unfamiliar words in upcoming sentences, so he would continue reading as some sentences or paragraphs explained others: *“... I just move on*

because sometimes while I am reading I find what he or she is trying to say” (Interview 1). In Table 12, as the results of the second phase suggested, 41 participants agreed that they skip the unknown words, whereas only 20 participants disagreed and 13 were neutral. Why they would do so had been asked about in the web survey as 60 students thought that the subsequent sentences might explain the meaning of unknown words and therefore they skip them. Ten participants disagreed and only three participants were neutral. Other participants of the first phase were interested in finding out the meaning of every unknown word in a dictionary, as some asked to do so while they were reading the TAP text. This meant that they were unable to make a mental representation of the text without knowing the meaning of all words. In this case, participants’ inability to obtain the gist meant that not knowing words meanings negatively impacted their comprehension. This caused them to deliberately rush to apply a strategy to aid comprehension: that is, finding out the translation of the unknown words as they read:

... as I read I will find the meaning, in English language institute they taught us to leave it and continue reading but I cannot. It will be like there is one question mark here and then there is one question mark there and my head will be like exploding so I will try to understand it first. (Dan, Interview 1)

In this regard, 45 of the survey respondents agreed that they would try to find the meaning in a dictionary if they found unknown word; only eight participants disagreed and 20 were neutral.

Translation was found to be the second strategy used by some participants. Amy indicated that she would only try to find the translation if she felt that the unknown words affected comprehension: “... *I will keep reading ... but if it affects my understanding then I am going just to find it directly”*

(Interview 1). Sara also explained her use of the strategy: *"Yeah if I can I would look at the dictionary and try to fit it in to the passage"* (Interview 1). This is supported by the data from the second stage as 61 respondents to the web survey agreed that they would check the meaning of unknown words if it affected their understanding, whereas only 10 students disagreed. Translation can be done using bilingual or monolingual dictionaries. It seems that some of the participants preferred to use a monolingual dictionary that helped to improve their linguistic proficiency by giving the meaning of the unknown word in English, rather than giving the equivalent word in L1. Sandy, for instance, liked to use an English-English dictionary, as the English-Chinese dictionary confused her and she would not be able to understand. Reem also thought that using an English-English dictionary was preferable: *"I need a lot of time to translate, sometimes, my teacher or the lecturer said vocabulary I cannot find it in translation to Arabic. I have just to understand what the term means"* (Interview 1). She also later explained: *"... when I translate methodology into Arabic language it is nothing"* (Interview 2).

These participants appeared to believe that the English-English meaning would be more accurate, because they could not find an equivalent meaning for the unknown vocabulary in L1. In the second stage, participants' responses indicated that 32 survey respondents would use a monolingual dictionary to help them get the meaning of unknown words, with 26 students disagreeing with the same item.

However, sometimes it was too difficult for Sandy to understand the meaning in English, which led her to use another strategy: she would sometimes check the meaning of a word using YouTube, as the audio-visual explanation of the word would enable her to understand its meaning:

If I look at an English-to English dictionary, it is too difficult for me to understand so I use YouTube to check that word, in YouTube there are some videos and may be some cartoons and they have titles and that really helps as my English is not good... Three weeks ago I tried to find what ADHD means. I looked at the dictionary. It says it is a syndrome and children may have it but I do not know what it is really like. In YouTube, I found some videos talking about it with some teachers and also I could look at some students with ADHD. (Interview 1)

She also added: *"I will check the dictionary, and will write the meaning down here in case I need to read the article again"* (Interview 1).

In a wider community of postgraduate students at the same University, this did not seem a preferred strategy to overcome the difficulty of unknown words, as 42 participants disagreed with the item 'I watch YouTube videos to understand the meaning of some key words' and only 14 students agreed.

Another way of determining the meaning was for participants to find the definition of the unknown word in English, as they wanted to work out the meaning themselves: *"More frequently I use definitions. So, I use like what is the meaning or what is the definition instead of translation... usually Wikipedia provides a lot of definitions"* (Nora, Interview 1). Dan mentioned that he liked to use the dictionary in a different way, as he looked at the synonyms of the unfamiliar word: *"I will just look at the synonym and then I look whether it is a verb or a noun"* (Interview 1). As further evidence that students preferred to use English resources to get the meaning of the unknown words, survey participants were asked if they would try to find the definition of unknown words in dictionaries or websites like Wikipedia: 58 participants agreed with that item and only 10 disagreed. Similarly, in support of Dan's strategy of using synonyms, 54 respondents agreed with that item and only eight participants disagreed.

In order to comprehend a text with unfamiliar vocabulary, Elie mentioned that she may also translate the whole text into Chinese. Although she was aware of possibly obtaining an inaccurate translation, she still tried it at times:

... I just put it ... the whole paragraph into Chinese and I can get some meaning but most of the time it cannot translate correctly but this is to get the key words' meaning. So I can put them together to organise my point about the essay
(Interview1).

This strategy was not common among the participants of the second stage, as 49 of the web participants disagreed with the item that suggested the use of translation of the whole text into the students' first languages to overcome the difficulty of unknown words. There were only 16 responses in agreement with what Elie mentioned here.

Re-reading was another strategy that participants reported using to comprehend texts with unfamiliar vocabulary. Some students applied this strategy when reading the TAP text in the first session, to aid their comprehension:

Sara: ... is it ok to like go back to the previous sentence?

Reem: I will reread it again.

Amy: I will read from the beginning.

Sandy: ... new words! Maybe I need more time to read.

The results of the second phase corroborated this finding as 66 participants agreed that they would reread the text to help them comprehend it with only one respondent disagreeing.

Over time, participants mentioned that their vocabulary was increasing and the difficulty of unknown words had been alleviated: *“I think I will just keep going ... about that vocabulary is not so difficult. I think my vocabulary builds now ... not really that big like before but still vocabulary sometimes can be challenging”* (Amy, Interview 2). To the question of whether they still found unknown vocabulary to affect their understanding of the content of texts, Elie, Omar, Sara and Sam answered that it did not. Sara explained:

Of all readings I have done I only found a limited number of vocabulary as unknown compared to the first I have read, maybe because it has been a long time I read journals, books related to my area so I became more familiar to the vocabulary.
(Interview 2)

Also, in the second session of TAP, Sam stopped code-switching. I believe this was due to him progressively building a larger vocabulary. As a result, he did not use the French language in the second TAP report and interview answers. Sam attributed this improvement in his vocabulary knowledge to academic reading: *“My academic reading contains, let us say, more vocabulary, more complex vocabulary and that is why, I think my vocabulary get better”* (Interview 2).

4.5.2. Lack of adequate background knowledge.

For the participants, lack of background knowledge appeared as another key difficulty that hindered their comprehension. When activated, background knowledge helps students to process and comprehend new information in reading texts. When students lack adequate background knowledge about a specific topic, they are unable to establish a mental model to represent what they read in their minds. Therefore, the absence of background knowledge causes gaps in understanding, as Sandy explained: *“I always meet this problem*

because in the university my major was fine arts” (Interview 1). For Sandy, changing from a fine arts background to special educational needs meant that when she started the programme, she had little background knowledge or experience with which she could link new information that she encountered within the area of education.

Omar experienced the same difficulty and believed that this was because the ideas themselves that he encountered were complicated:

... some ideas are complicated... if you discuss philosophical issue for example nationalism some ideas are deep and complicated when you read it in another language it will be more complicated because you already do not understand the idea itself. (Interview 1)

This indicates that difficulties can arise as a result of reading texts that introduce an advanced level of content. This was investigated with the web survey respondents, who were asked if they would not understand a text if it introduced an advanced level of content. As indicated in Table 11, 44 participants agreed with the item, with only 18 participants disagreeing and 14 participants neither agreeing nor disagreeing.

However, difficulties can also be the result of reading culture-specific texts. The participants’ responses varied regarding whether the difficulty was because the content was complex, because of the introduction of contextual details about certain issues, or both. Amy believed that it was due to the complexity of the content rather than contextual details, which could be the case because she already had a background in her area of study: *“Well, the context is not a problem for me, maybe it is just because the idea is odd”* (Interview 1).

When cultural artefacts were the cause of reading difficulty, one participant indicated her helplessness in managing the problem, emphasising that translation would not work:

I think it was related to the culture of the UK, for example, two weeks ago we discussed grammar school and academic school, yeah, I cannot understand the difference between grammar school and public school, it was very difficult, it was new to me, because in my country we have only private school and public school.

(Reem, Interview 1)

Sara reported a similar difficulty: “... last time the professor was discussing a metaphor. When I look at the dictionary, the meaning was not clear to me. I had to confirm from the professor what it means” (Interview 1). She went on to explain:

... even what I learned today, I learn about icons and how it describes the picture of a bird holding a leaf. It says about peace and it has a cultural background. I have no idea why there is a relation between birds and peace, it is because of English culture, because in my country there is no relation between birds and peace. (Interview 1)

Although the confusion reported above could be classified as a listening rather than reading comprehension problem, the content was directly connected to what the participants were studying. In both cases, Reem and Sara were unable to make a proper mental representation of the text and, eventually, they were unable to make a connection between what they listened to or read (the new information) and what they already knew (their background knowledge), making them unable to understand the content. In this regard, survey responses as indicated in Table 11, were not showing whether background knowledge was impeding participants' understanding. To the item ‘I can not

understand some texts because they introduce some cultural artefacts (contextual details)’, an equal number of 27 participants either agreed or disagreed with it, with 21 respondents choosing to be neutral.

In relation to the difficulty with background knowledge, Dan complained of the advanced level of statistics that he had to tackle while reading for academic purposes: *“The journals’ articles are complicated ... I can understand but the graph and statistics I do not understand. A lot of time I feel helpless in understanding this”* (Interview 1). Here Dan indicated that statistics are very complicated and difficult to understand, though they form a key component of some academic papers. Dan therefore required prior knowledge about statistics to enable him to make sense of what he read. Lacking background knowledge was resulting in failure to understand; therefore, comprehending an important part of academic papers in psychology was proving impossible. This sheds light on the complex nature of academic texts and the fact that it is not only the students’ linguistic ability that affects comprehension. With regard to the item that asked if statistics make some academic papers difficult to understand, it did not seem that statistics posed a difficulty to a larger community of postgraduate students as 31 respondents disagreed with that item and only 24 responses were in line with what emerged from the first stage; 19 participants were neutral.

Participants’ responses also indicated their awareness of the effect of the time that they spent in their academic programme on familiarising themselves with the subject matter. The more time that they spent in the academic programme, the more they became accustomed to major issues in their subject areas. Reem explained that she understood the reading text of the TAP session, as it discussed special educational needs, which was the subject of her

major. She also added that if she had been given the text three weeks prior to the first interview, she would not have been able to understand it:

When I read about engineering or business management or something like that I cannot understand. But as for inclusion and special needs I have good background, it is not good but just three weeks ago. I read about it and I had lectures about it.
(Interview 1)

In the second round of interviews, participants indicated that their level of background knowledge, though still a source of difficulty, had improved. They thought that they were more competent after spending time immersed in their academic study. For example, Amy explained, *“It is a bit difficult ... but it rarely happens to me now”* (Interview 2).

Elie also found her background knowledge to be improved. She explained that this was due to reading more in the previous semester: *“I think it is better than before ... because last term I read a lot of things so I think I have basics of background”* (Interview 2).

Sara was also one of the first phase participants who believed that they had improved over time. She indicated that a lack of background knowledge would only make it difficult for her to understand a text if she did not try to understand. This change was referred to in the strategy used to overcome such a difficulty as she became a more independent learner. Sara tried to learn by herself and did not always ask the lecturer or native speakers first as she used to do. This autonomous attitude towards learning was also shown on another occasion when she indicated that she no longer felt that she needed support to read long texts in a shorter period of time: *“Oh, I think now I read independently without support”* (Interview 2).

This is in line with the results of the second phase, where participants responded to the item *'The more time I spend in the academic programme, the more I understand issues and topics in my major'*. As shown in Table 11, 71 participants agreed with that item, whereas no one disagreed with it and three participants were neutral.

The students reported many strategies for overcoming the difficulty of lacking background knowledge. For unfamiliar texts in which difficulty resulted from complex content, students reported searching for texts that introduced an overview of the focus, as seen in the following responses from the first interview:

Amy: ... because I have no idea, I tried to find some texts that gives an overview, I find some very basic readers which cover what communicative language teaching is.

Elie: ... after the first class of Middle East I ask for some help during my tutor office hours, she helped me with some easier articles to help me understand the module.

Sandy: ... I found the article difficult to read and the topic is totally new to me. I even do not know what the topic means. So, I use a dictionary, Google the topic and find some related information about the topic.

This strategy of finding easier texts to read was also preferred by most of the survey participants as 49 students agreed that they would *"try to find easier texts that introduce the content"* while only 12 students disagreed with that item.

Seeking help from a supervisor or other classmates was another strategy used to tackle complex content. Dan reported that he asked lecturers to explain statistics to him, and asked some classmates to explain statistics in L1: *"At first, I will ask my lecturer, I went to his office and asked him. He talked quite fast so I*

cannot understand ... Then, I will go to ask my friends and they explained to me in Mandarin" (Interview 1). In contrast, for unfamiliar texts that caused difficulties due to cultural artefacts, students reported that they asked native-speaking students for help, or would also ask lecturers. They understood that translation may not work, and therefore chose to seek help from native speakers, whether they were classmates or lecturers. Sandy stated, *"... the grammar school and comprehensive school, I just got confused about grammar school and ask that question to the lecturer and he told me what it means"* (Interview 1). Similarly, Sara said, *"... Maybe read first, when I do not understand I ask my friends who are native speakers and then they would explain to me"* (Interview 1).

In the second stage, 29 participants were against the use of this strategy of asking for help from a supervisor or classmates to tackle the difficulty of complex texts, while only 19 participants agreed with it. Similarly, with regard to another item that stated that students would seek help from a native speaker if a text introduced cultural artefacts, 24 participants disagreed with that item while 22 chose to agree. It can be concluded that seeking help from others was not a preferred strategy by students in a wider circle of postgraduate students at the same University to tackle these difficulties.

Students also reported using L1 texts to familiarise themselves with unfamiliar academic topics, because reading in L1 was easier for them:

Reem: I always try. I read in Arabic language first, then I will read a simple text in English. (Interview 1)

Nora: ... I will search the content or the concept in my mother tongue yeah just to give me a brief explanation about this. (Interview 1)

Omar: I sometimes search it in Google or I find the same topic in Arabic. (Interview 2)

Not all participants liked to depend on their L1. For instance, Amy's English proficiency could be classified as high-level; therefore, she did not try to find texts in L1 to help her cope with a lack of background knowledge. However, students who could be classified as less proficient readers expressed a preference for reading in English. For example, Sandy was aware that reading in L1 may not be helpful because the two language contexts are different (China and UK):

At first I tried to do this but I find the two contexts are very different. The Chinese articles make me confused because China and UK have totally different educational systems so maybe it is better for me to read English version. (Interview 1)

Therefore, the decision to use L1 as a facilitative resource was taken with its usefulness in mind, in addition to other factors such as personal preference. Omar, for instance, reported that he was using L1 texts to overcome the difficulty of academic reading even in the second round of interviews. The fact that Omar was majoring in Middle East and Islamic Studies makes it understandable that he would still use L1 as a facilitative source, as he was likely to find relevant material in his L1.

The use of L1 texts as a strategy to overcome the difficulty of lack of background knowledge was investigated in the second stage: 29 participants disagreed with that item whereas 28 agreed.

In addition to the above strategies, lecturers' explanations during class discussions could make the content of the required reading list easier for students. Asked if she found articles easier when re-reading them after lectures, Reem replied, *"I read the text again to understand it very well. Yeah of course it is easier because of the explanation and examples"* (Interview 1). Amy's

response to the same question highlighted her preference for re-reading: *"I try really, I just want to have deeper understanding I do not want to forget what I have learnt not reading details just skimming"* (Interview 1). The quantitative strands of data indicated that 66 respondents to the survey agreed that they reread the text to help them comprehend it; only one participant disagreed and six were neutral. This large number of participants indicated that such a strategy is common among postgraduate students.

4.5.3. Criticality as a new and significant issue.

Criticality was also among the aspects of academic reading that students classified as a difficult requirement of proper academic study. 40 respondents to the web survey agreed that they found it difficult to be critical when they read for academic purposes; 26 participants disagreed with this item and 11 were neutral. There are various reasons why reading critically is difficult. For some participants, it was a new concept and they were not familiar with how to be critical. Amy explained, *"... it is new thing, I did not do it in my country. I really try my best for this"* (Interview 1). Elie echoed this comment, saying *"... it is really different system and different way to the one I think in before. It is really difficult"* (Interview 1).

Unfamiliarity with the concept of criticality was an item in the survey, to which more than half of the students, 39 respondents, agreed that it was a new concept to them, while 27 participants disagreed and 11 were neutral. This suggests that being unfamiliar with the concept can exacerbate the challenging experience of academic study in general.

Some participants in the first phase agreed that it requires a deeper level of understanding of academic texts.

Sandy: ... we need critical thinking so we need to understand what the author says and to think. So it makes reading an article more difficult.

Nora: It is really challenging to expect us not only to get through the meaning, but also to criticise it. I do not only have to understand but I have to be able to connect to my own experience and see whether it can work in my context or not.

Omar: ... if I want to be critical and evaluating, then it takes longer to read because you should find which point you want to comment on and which one you agree or disagree with.

In addition to understanding what the text conveys, criticality requires further levels of analysis, linking ideas, comparisons, and so on, which Dan described as follows:

... my supervisor asked us to critique a paper. I find it very hard because just understanding it is actually very tiring and taking a lot of time at first. When we criticise or critique a paper for me I was just listening and I do not know what the class was talking about ... but through these three months I can see some improvement. (Interview 1)

Here, Dan emphasised that he was unfamiliar with how to critique the paper at first, but indicated that, over time, he noticed improvement in his performance, meaning that he had acquired a skill that he was lacking at the start of the term. This was investigated in the second phase and the results were in line with what Dan stated here. Regarding the item '*criticality is difficult as it requires a deeper level of analysis, linking ideas, and comparisons*', 64 respondents agreed with it, whereas only five disagreed and 8 were neutral.

When asked about criticality in academic enquiry, the participants' perceptions in the first phase varied considerably. They believed that it was necessary to not only judge, but also state their understanding and be able to

understand the meaning between the lines. They also discussed comparing the content of different resources. Reem noted, *"It is not to judge, to state your understanding of the views and hidden meaning"* (Interview 1). Sara similarly commented, *"... we do not just read, but we have to understand and then we have to compare with what we have been reading in another resource"* (Interview 1). Other participants believed that the purpose was to evaluate and question what they read, as seen in the following responses from the first interview:

Sandy: Critical reading means I can read and have my own opinion may be the same as author or may be totally different... I find it difficult because I am always influenced by the authors.

Sam: ... just to identify the limits of the texts.

Elie: ... I can not only accept ideas I have to think why it is right and find some more evidence to approve or why I disagree with this idea.

Here, participants indicated their conceptualisation of criticality. Over time, they began to notice changes in their performance. For example, Dan observed improvement in his skills as early as two months after the start of the programme. In addition, in the second TAP session, though some participants indicated that they still found it difficult to read critically, they showed some changes that proved that they were starting to engage critically with texts. In the second session, when asked about criticality, Sandy noted, *"maybe much easier than before, but critical thinking is still difficult thing for me"* (Interview 2). However, when reading the TAP text, Sandy added:

because it is the abstract so I start to think about how the writer will go on to organise this whole essay and I prefer to read the abstract at the beginning because I can find some key words, I

find some, and then it is easy to understand the whole structure of this essay” (TAP report 2).

She indicated that she examined the text structure while navigating the text. In addition, when reading another section, she commented:

The purpose of this study was to explore how elementary students responded to literature featuring characters with different disabilities. So I will highlight this because it talks about the purpose of the study. So, maybe every time while I read this I will read this sentence twice or three times to try to remember the purpose of this study and I will continue to read the whole paper. (Sandy, TAP 2)

Here, Sandy demonstrated another important skill in engaging with a text critically, namely considering the author’s purpose. Although Sandy was employing this skill, she was unaware that this was part of being critical. When they were asked about criticality, many participants gave similar responses. They believed that examining what was being read in relation to other material was the core of reading critically. However, critical reading can also be demonstrated by other skills, such as those discussed in Sandy’s performance, or what Dan demonstrated during the second TAP session. In this TAP session, Dan was reading the following extract:

Many employers in Australia are experiencing ageing workforces. Yet age, attitudes and discrimination can impede effective management of older workers. Here we explore the attitudes of a mixed sample of university undergraduates and community members towards older workers. A total of 64 males and 89 females completed questionnaires assessing attitudes towards older workers and general knowledge of older adults.

Dan voiced his scepticism about the author's content: *"So when I read until here, I am thinking this is a questionnaire so it is reported, and my lecturer told me about critical thinking that people may not be accurate in reporting what they understand themselves"* (TAP report 2). When he had finished reading, Dan demonstrated his understanding of the associations presented in the text: *"When I read about association I realise that this is not experimental cause and effect, it is just correlation"*. He then commented on the validity of the sample: *"So when the mention about sample I think undergraduate who lack experience so it may not be accurate enough and community members. Emm, I will question how much proportion is the university graduates"*. Dan then completed his reading: *'But hypotheses relating to associations between knowledge of ageing, age, education and hours worked per week were largely not supported.'* and stated:

I am curious to know about this, I understood correlations and I understood P value. So it is only just two, which means that this study, this is not one of the A stars journals in the college. Yeah because I read a lot so I know which journal is high impact and which journal is not high impact. So he uses regression to predict. So the prediction is actually below....then I go to the methods because it is a questionnaire, I would check the reliability, this is a good one. This is how I read now.....so it is a big difference from last time. Last time I will be like (utterance not heard) in the statistics tables, now it is like I will look at the coefficient and it is .90 to .95 and that is good and then I will jump to the discussion part '. Dan, TAP 2.

It is clear that Dan was checking the results of the study and wanted to be sure that they were convincing. Dan also appeared to be applying some skills of reading critically without knowing that he had become more critical in reading. In his first interview, Dan suggested that the meaning of criticality was to *"find flaws in the stat"*. His performance in the second TAP session suggests

that he had already developed his approach of being critical in reading as he was focused on what to read and what to skip:

... and then I go to the methods because it is a questionnaire, I would check the reliability. It is a good one! This is how I read now ... so it is a big difference from last time. Last time I will be like (inaudible) in the statistics tables now it is like I will look at the coefficient and it is .90 to .95 and that is good. And then I will jump to discussion part. (TAP 2)

This illustrates that in comprehending the reading text, Dan was able to understand more than the literal meaning and engage critically.

From the above examples, it can be inferred that participants found it difficult to conceptualise what criticality means. Therefore, the ambiguity of how to be critically engaged with a text is a catalyst for its inherent difficulty. It is also worth noting that participants may have come from cultures in which criticality is not valued or practised in the academic system, making it simply a skill that they are not trained to practise while reading.

4.5.4. Inability to draw the required inferences that feed into construction of a mental model.

In some cases, the students were able to identify the meanings of all the words in the paragraphs but still found it difficult to understand what the authors were trying to say. In these cases, participants were unable to draw inferences that would help them establish the mental model of a given text. Elie stated, *"In my reading after I know the meaning of the words, it is still difficult for me to understand the meaning of what the writer want to tell us"* (Interview 1). Reem also noted, *"Sometimes I understand the meaning of every single word but when I read it together, the meaning is lost"* (TAP report 1). In the second stage, more than half of the participants, 53 students, agreed that they sometimes

knew the meanings of the words but were unable to construct a meaning of what the author was trying to say. With regard to the same item, 15 participants disagreed and 8 neither agreed nor disagreed.

Participants who reported difficulty in establishing a mental model explained it in the same way: that they knew the meaning of the words, but were unable to make sense of what they read and construct a meaning from that text. These quotes tap into the notion that drawing inferences that are important for the establishment of mental model is largely affected either by vocabulary or background knowledge. Elie mentioned that she was familiar with the words in the paragraph, but was unable to understand what the author was trying to say. To negotiate that difficulty, she used a strategy to help her understand the text, in which she divided the sentences into different groups:

I think from the start of this part I can feel a little familiar with some words and just as I said I put them together, sense group yeah, if you cannot understand the sentence you can divide into some groups ... my IELTS exam teacher told me that we read some articles in other languages and we cannot just understand word-by-word, you can divide the sentence into some different sense group because it is the way that foreigners think to understand. (TAP 1)

For Nora, academic English texts seemed compact in the sense that many details are given, perhaps even in one paragraph, and the sentences are usually written concisely. This made her unable to infer connections between ideas that were presented in a paragraph. As an example of students being unable to draw inferences due to lack of background knowledge, during the TAP, Nora was reading the following extract:

And as Lantolf (2000) notes, 'according to Vygotsky, this is what development is about' (p. 80). SLA researchers have focused on learners' linguistic development in the zone of

proximal development (ZPD), Vygotsky's conception of what an individual can accomplish when working in collaboration with others (more) versus what he or she could have accomplished without collaboration with others (less). The ZPD points to that individual's learning potential, that is, what he or she may be able to do independently in the future (Adair-Hauck & Donato, 1994; Aljaafreh & Lantolf, 1994; Anton, 1999, 2000; DiCamilla & Anton, 1997; Nassaji & Cumming, 2000; Ohta, 2000; Swain & Lapkin, 1998). Others have focused on the use of private speech or speech directed to oneself that mediates mental behavior.

She then commented:

Here in the previous part, it focuses on ZPD and then after that it comes to discuss private speech and then they are still in one paragraph and it is like oh where am I now? I am reading about ZPD or am I reading about private speech... they mix up, that is why I find it hard to understand the content because one is about ZPD and then the middle somehow the private speech comes. (TAP report 1)

This part of the article discussed Vygotskian socio-cultural theory and compared it to other approaches; however, Nora's lack of background knowledge of ZPD and private speech did not allow her to make the necessary global coherence inferences. These inferences function to make the whole text coherent (Oakhill et al., 2014). Therefore, if she was unable to draw these inferences, it would be impossible for her to understand the discussion of private speech at the end of the paragraph. Naturally, she was not going to comprehend the whole text and how these two concepts (ZPD and private speech) related to each other. Nora believed that it was this feature of English academic style that caused her difficulty: in her L1, issues are explained step-

by-step, unlike in English, which is compact and stated directly. She tried to explain the differences as follows:

I am not used with the style of writing. The style of writing in my first language is obviously different from the style they have here. Like in my first language, we have kind of redundancy style but here in English it appears to me to be more compact. While in my first language they would explain it step-by-step, not directly. (Interview 1)

As Nora was a TESOL student who had previously spent some years reading English texts, her difficulty with the English academic style was not expected. In order to cope with this difficulty, she indicated that she would look for the connection between two aspects at the end of the paragraph or in the conclusion. If Nora could not find it, she would try to find a different text that explained the connection between the two points: *“... I will usually try to Google what connects these ideas and then if I find one part, oh, I really understand what makes them appear in one paragraph like that”* (Interview 1). Regarding this strategy item in the survey, namely using Google to find the connection between ideas, 35 students agreed with it whereas 18 students disagreed.

Omar also indicated that he found the academic style difficult because he could not follow many details that were introduced in short sentences. He seemed to be unable to draw inferences about what connected these details in a cohesive way: *“... the academic style itself is hard for me to follow as it provides many information in short sentences”* (Interview 1). For Omar, the challenge was the same as for Nora: once many things were discussed in one paragraph, he was unable to infer the connection between them, resulting in difficulty in comprehension.

In the second interviews, Nora reported that she still found the academic style difficult to understand. However, the change over time was apparent in the strategy that she adopted to cope with this difficulty. Nora started to be more selective in what to focus on: “... *nowadays when I read I do not get too details, I just like pointing out some particular terms to focus on the findings. I do not go to details anymore*” (Interview 2).

Web survey respondents were asked if the unfamiliarity with the English academic style made the English academic style challenging. 31 respondents agreed, while 26 disagreed, with 19 students remaining neutral.

Students also were unable to draw inferences and establish a proper mental model of the text because of the length of sentences. They reported that English sentences became confusing when they were too long, making them unable to make sense of the sentence. The following quotes are examples:

Sandy: I am just confused because the sentence is too long... I really feel lost.

Reem: ... sometimes also I understand every single word but when I read them together, the meaning is lost.

In response to the question about the problems that she encountered, Elie answered, “*the structure of the sentence, sometimes I read really long sentences. So I have to cut it into parts*” (Interview 2).

While reading a sentence during the TAP session, Omar commented that he was unable to follow it, and eventually the idea was lost: “... *I do not follow the idea, I just lost it*” (TAP report 1). When asked why it had happened, he answered, “*Maybe because the sentence is too long and I find some words difficult to read so when I take long time to read, it distracts me from focusing on*

the main idea" (TAP report 1). Although at first glance, Omar's difficulty here seemed to be related only to unfamiliarity with the words, it was also related to memory and how he processed the upcoming information, as he also noted, "... *reading slowly makes me distracted*" (TAP1). When reading slowly, Omar encountered the same difficulty, because he spent a long time trying to pronounce words, and then was unable to connect what he already knew with the upcoming details.

Sentences may also appear to be too long due to having many citations, numbers, names or examples, which caused the participants to lose the overall meaning. For example, Nora commented, "... *but when it comes to the meaning more and more citation is put, I feel difficult to understand it because it distracts my attention between numbers, years of publication, and page numbers. This somehow alters my attention*" (Interview 1). Here, Nora stated that the use of many numbers distracted her attention, and it was therefore difficult for her to process the content of the text and make sense of what it conveyed. Similarly, Sandy was unable to comprehend the sentence as it was too long and detailed. Both participants were unable to integrate important components, as they struggled to process the first part of the sentence and link it with what came at the end of the sentence.

In the second round of interviews and TAP sessions, the difficulty with long sentences remained for some participants. Sandy pointed out that long sentences were still problematic while reading academic texts. In the second TAP report, Nora also indicated that she still found the sentence structure confusing:

... I know what this article try to propose, I get the point of what they are doing and then it is just quite confusing especially when the sentence is of, I mean, complex structure like when

they explain about the effect of corrective feedback in comparison to immediate and delayed feedback. (TAP report 2)

In the second stage, 36 respondents agreed with the item that they found it difficult to read long sentences while 23 students disagreed and 17 chose the neutral response.

Participants' inability to comprehend long sentences demonstrated how they were affected by the limited capacity of working memory. Working memory is responsible for processing and storing information temporarily (Grabe, 2009). It has a limited capacity as it "maintains information actively for one or two seconds" (Grabe, 2009, p. 32). According to Oakhill, Cain and Elbro (2014), in addition to processing the meaning, working memory also integrates current meaning into the meaning that follows. Due to the length of time spent decoding words or reading very long sentences, it seems that participants failed to use the central executive element to organise the incoming details of the sentence and integrate them into the meaning of the first part, resulting in comprehension difficulty.

The participants all utilised strategies to overcome this difficulty, such as trying to analyse the sentence to establish the subject and the verb:

Sandy: ... because the sentence is too long, I have to find out the subject, the verb, and make sense of what the sentence is talking about... I have to read one time, two times, and may be three times to find out the subject, verb and other parts. (TAP report 1).

Sara: ... one of my strategies when I do not understand, I look at the subject of the sentence and then find a verb so yeah I will understand what the sentence is about (Interview 1).

This was investigated with survey respondents: 46 students agreed that they would try to find the subject and the verb if the sentence was too long, while 14 participants disagreed with that item. 11 chose to be neutral.

In addition to the above, Nora indicated that she skipped distracting details to focus on words: “... *I imagined that those numbers do not exist. So I just focus on words*” (Interview 1). She went on to explain:

...literature review is like too many somehow. Well again it distracts my focus. For things like this I will jump directly. I will not pay attention on this unless there is something interesting like names I know so I pay attention to. (Interview 1).

This demonstrates that Nora was trying to avoid what she found distracting in order to focus on the essence of the text. This seemed to be a strategy used by most of the survey respondents, as 50 students agreed with the item ‘*If there are too many numbers and names, I just skip these details and focus on the words*’, whereas only 10 participants disagreed.

Dan reported using a similar strategy, highlighting different parts of a long sentence, which would enable him to look back at the sentence and reread it to make sense of it: “*I will look back and read the whole thing, usually I will highlight or colour with crayons so I will look back at this and that and this and that*” (Interview 1). Data from the other strand supported this result, as 68 participants agreed that they would highlight the important details and reread them to make sense of the sentence, and only four students disagreed.

4.5.5. Misunderstanding the text.

Although it seems vague to say that some ESL readers may misunderstand a text due to many different factors, e.g. unfamiliarity with the academic style or unknown words, this difficulty seems to have no single direct

cause. Some participants said that they found the paragraph or sentence difficult simply because they were not confident in their understanding of the text. While other difficulties are explicit and a reader can state whether he/she has understood the sentence or not, this difficulty is more serious because a student may not be able to notice that they have misunderstood a text. This can lead to consequences, as students usually incorporate their reading into their essays. They therefore could incorporate an inaccurate meaning into their essays, which could be classified as plagiarism. When asked about other problems that they encounter, participants gave the following responses:

Sara: I am afraid of misunderstanding. There is a difference between what I understand and what other people understand yeah. (Interview 1)

Reem: Sometimes I am not sure about the meaning I understand very well or not. Yeah, because I had an experience. In the pre-sessional course, I understood something in an article and I paraphrased it. The teacher told me this is not logical idea. I told her that this was from an article. She explained it to me. I misunderstood. (Interview 1)

Sara: I do not find difficult words, but I am afraid of misinterpreting what he means. (TAP report 2)

In regard to change over time, Sara stated that she had improved, in that she only experienced difficulty if she was unfamiliar with the subject area. When asked if she still misinterpreted academic texts, Sara responded, “No, if I am not familiar to the area I will encounter that problem” (Interview 2). Similarly, Reem reported that she had improved in the way that she approached writing, as she was no longer trying to use her interpretations if she was unsure of their accuracy: “I think no I have improved now. I do not write anything I do not understand” (Interview 2).

4.5.6. Inability to concentrate due to distraction.

Two participants, Amy and Sam, reported that inability to concentrate when reading was a difficulty that they were concerned about. They attributed this to many distractions, such as phones, with Amy noting, *"It is actually about concentration, sometimes I just cannot concentrate with reading, I do not know it is because of distractions like phones"* (Interview 1). Sam also commented, *"I do several things in the day"* (Interview 1). Amy reported no change over time, and was trying to overcome this difficulty by reading in a quiet place: *"I prefer to read in my room because it is so quiet"* (Interview 2).

Students' inability to focus due to distractors was introduced to survey respondents. More than half of the respondents, 48 students, agreed that they found it difficult to focus because of distractors such as phones; 16 participants disagreed with that item and 11 neither agreed nor disagreed.

4.5.7. Translanguaging when reading.

An emergent finding that first appeared in the pilot study results is that ESL students, even at postgraduate level, demonstrate differences between what they read in English and how they process it in L1; they seem to be 'translanguaging'. This means that they tend to think in L1, spontaneously shift back and forth between English and L1, and use both languages concurrently to understand the reading text. Translanguaging utilises the L1 repertoire to make meaning, and therefore it is an accepted and encouraged practice (Garcia & Li Wei, 2014). However, in the present study, participants seemed to be resisting it and unhappy with this concurrent use of the two languages while trying to make sense of what they read. They perceived this practice negatively as they described it in the first interview as time-consuming:

Sandy: It really takes more time to do that but if I do not do like that I cannot carry out, cannot make sense.

Omar: I think it is mental operation happens because I am still not so good in English though sometimes if I want to understand I try unconsciously to find the equivalent Arabic way of expressing it.

Reem: I think it takes a lot of time, after three months I will think in English, not in Arabic because it is different meaning sometimes.

The two TESOL students who had finished their BA using English as a medium of instruction did not mention this problem, which can be explained by them becoming familiar with reading texts in English. Nonetheless, this explanation is challenged by one participant (Sara), who had finished her undergraduate studies in English language education but now studied educational technology. Sara mentioned that she sometimes shifted between thinking in L1 and thinking in English, demonstrating that she still tended towards translanguaging at times. It can therefore be inferred that translanguaging can occur with both high and low proficiency readers. When asked in the first interview whether their translanguaging made academic reading challenging, Amy and Sara gave the following responses:

Amy: I used to when I was doing my BA but it really does not work with me because we have different grammatical style, really it is totally different.

Sara: I sometimes make a shift to my first language for certain words. I mean not every time I read I make a shift ... it depends.

Participants' responses in the second round of interviews demonstrated that this had either stopped or decreased. This time, when asked if they still

shifted between their L1 and English while reading, participants responded as follows:

Reem: No, it is bad way.

Sara: I did it before but for now I do not.

Dan: I think thinking in Mandarin decreases a bit. I am more thinking in English.

Elie: No ... because Chinese and English are quite different language systems. I think if I learn my major in English I should understand in English not in Chinese.

These extracts indicate that the more participants become immersed in reading in the second language, the less they translanguage. This was also found in the second stage, as later in the academic year 37 disagreed with the item *'I read in English and then I try to think about it using my first language'*, while only 25 agreed and 14 responses were neutral.

4.5.8. Availability of books.

Students in postgraduate taught programmes are always advised to read from the reading list of each module, which contains core reading references. These core references are usually available at the university library in hard copies; however, they are only available in small numbers, which Nora and Sam raised as an issue. In the retrospective TAP, Sam reflected on the difficulties he usually faced when reading for academic purposes. He mentioned that he could not afford to buy some of the books and, when it was suggested that they were available at the university library, he mentioned that they are only available in small numbers compared to the large number of students in a module: *"... but you know we are a lot in the module and if I wanted to get one from the library it is not available"* (Interview 1). However, both Sam and Nora believed that the

availability of hard copies for core reading references was a facilitating factor that would make reading easier and more accessible to them at all times.

In the second phase, participants responded to an item that asked about the availability of the core references in the university library: 28 respondents disagreed with the item, whereas 27 participants agreed that they found it difficult if the books were not available in hard copies in the library; 19 students neither agreed nor disagreed.

Nora indicated that she liked to read online, but complained of the poor quality of some scanned books:

Yeah, the scanning quality of electronic library, and also the core reading of every subject, I hope they are all available in print ... I realise that there is always a core reading for every subject and I hope that the university provides that core reading in accessible enough amount. (Interview 1)

This issue was also investigated in the second phase: 60 respondents agreed that they find it difficult to read scanned books if the scanned books are of poor quality. Only 8 participants disagreed and three students were neutral. This illustrates that there are hard copies for the core reading modules, but students are willing to find alternative copies for the core reading of each module. Nonetheless, the availability of books in hard copy would make it easier for some students to adhere to their learning style by reading from printed material.

Although this difficulty does not result from lacking specific skills, it draws attention to how external factors such as books, whether in print or online, affect the academic reading experience of ESL international students.

4.5.9. Summary of the academic reading difficulties

To summarise, the difficulties that ESL postgraduate students in this study encounter while they read for academic purposes can be due to lack of vocabulary knowledge, lack of background knowledge, unfamiliarity with the concept of criticality, inability to draw inferences that help to establish a mental model of the text, or misunderstanding texts. Difficulties can also arise as a result of students' inability to concentrate due to distractors. Additionally, translanguaging when reading poses a difficulty for ESL students, and lastly, the availability of books is another concern of students. It can be inferred that not all of these difficulties relate to the linguistic proficiency of students as some of them relate to lacking other skills.

These difficulties were used to measure the total of perceived level of difficulty students encounter while they read for academic purposes, and the relationship between this perceived level of difficulty and the participants' IELTS score was correlated to answer a further research question, as discussed in the following section.

4.5.10. What is the relationship between international students' English language proficiency as measured by IELTS and their total perceived level of academic reading difficulties?

In order to investigate the relationship between international students' English language proficiency as measured by IELTS and their total perceived level of academic reading difficulties, a preliminary analysis was conducted. Figure 7 is a scatterplot showing the relationship between these two variables. The line of best-fit is also shown. As can be seen, there is a negative correlation between the IELTS overall score and the total perceived level of difficulty.

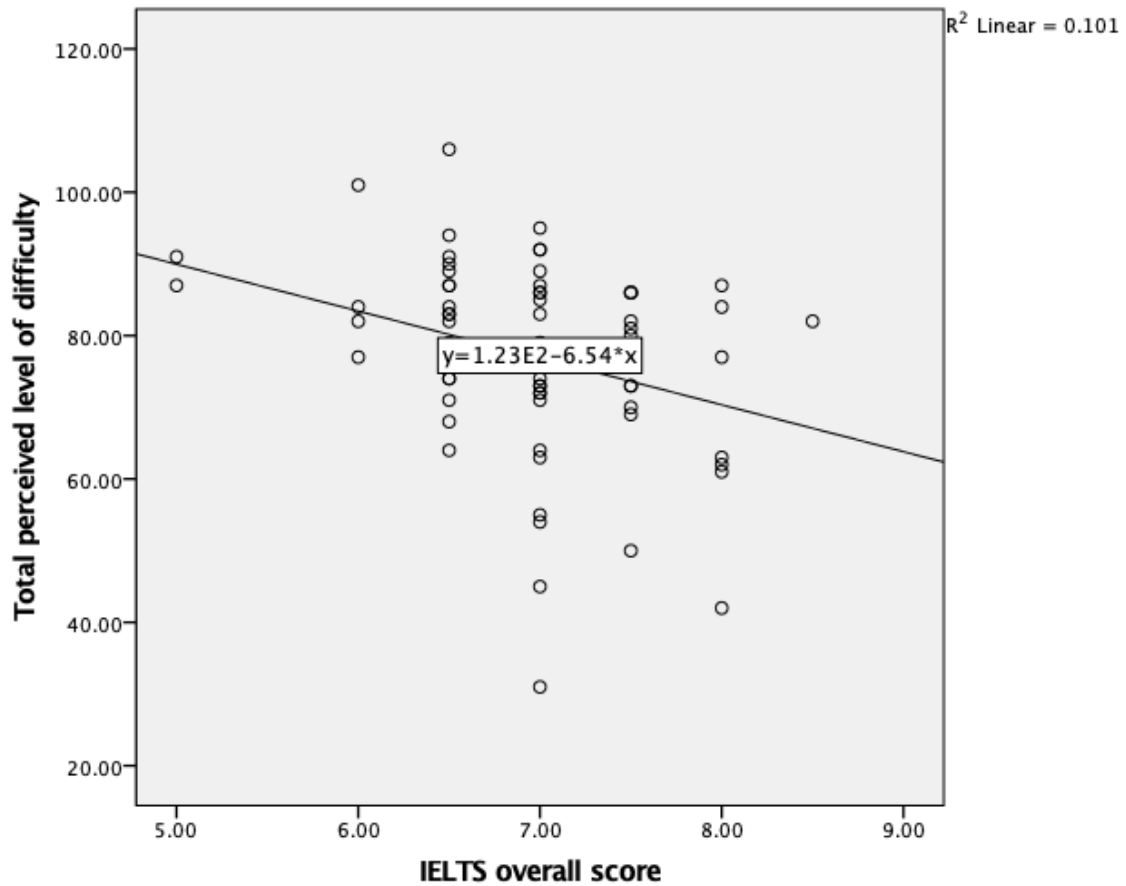


Figure 7. The relationship between IELTS overall score and total perceived level of difficulty

Spearman's rho test was calculated. It indicates a moderate and significant negative correlation ($r = -.31$, $p < .01$). This means the higher students scored in IELTS overall, the lower the level of difficulty they encountered.

A second analysis looked at the specific relationship between students' perceived level of academic reading difficulty and their scores on the reading parts of the IELTS test. Figure 8 is a scatterplot showing the relationship between these two variables. The line of best-fit is also shown. As can be seen, there is a negative correlation between the IELTS reading score and the total perceived level of difficulty.

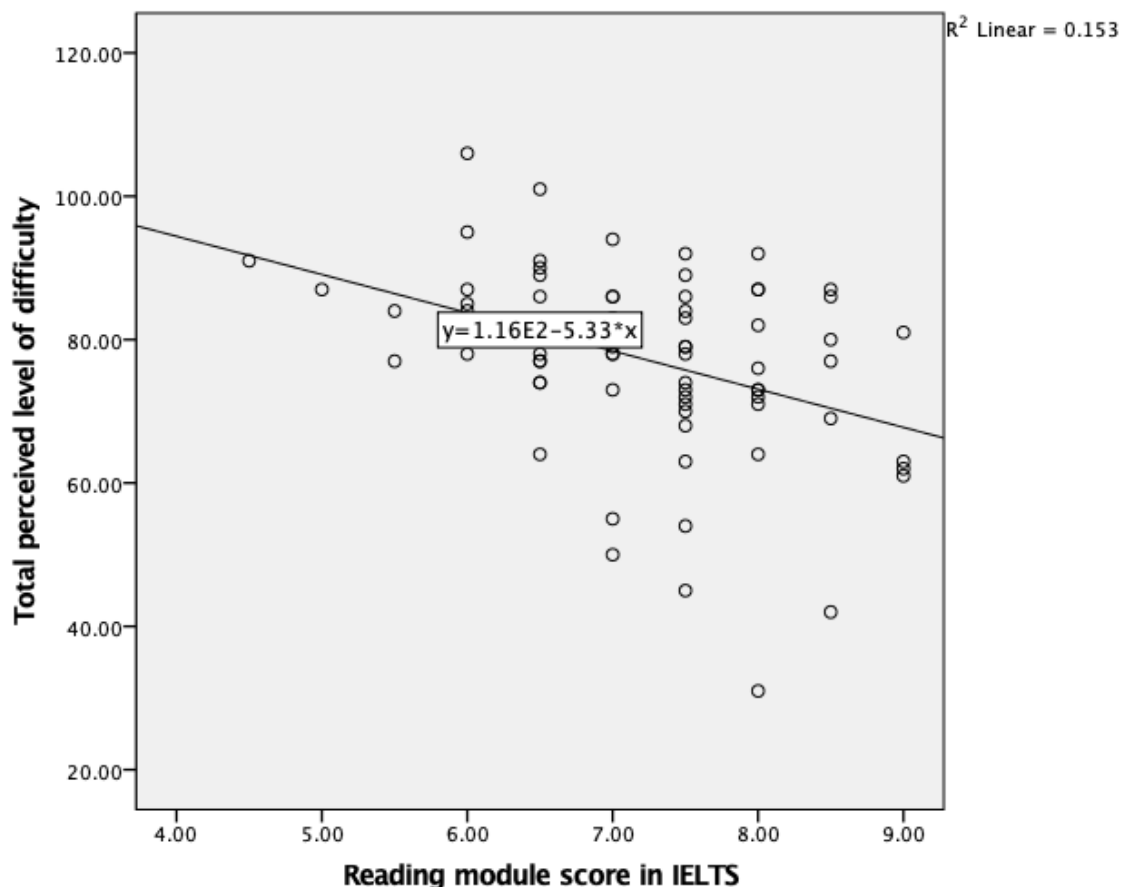


Figure 8. The relationship between IELTS reading module score and total perceived level of difficulty

Spearman's rho test was calculated. It indicates a moderate and significant negative correlation ($r = -.40$, $p < .01$). This means the higher students scored in IELTS reading module, the lower the level of difficulty they encountered.

4.6. Factors that helped students to overcome academic reading difficulties

Different factors helped the participants to overcome academic reading difficulties, including feedback from an academic tutor, help from friends or classmates, discussion in Facebook groups and linguistic support.

Before presenting the findings of these factors from the two strands of data, Table14 shows the percentages of the second stage participants' responses to the factors that helped them overcome reading difficulties.

Table 14

Percentages of participants' responses to the factors that helped them overcome reading difficulties

| | The factor | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Not applicable |
|---|---|----------------|------------|----------------------------|------------|-------------------|----------------|
| | | Percentage | Percentage | Percentage | Percentage | Percentage | Percentage |
| 1 | I believe that pre-sessional courses are important for all international students even those who have achieved the required IELTS score | 11.7 | 29.9 | 23.4 | 13 | 2.6 | 14.3 |
| 2 | Other international students are helpful and I share knowledge with them to overcome reading challenges | 1.3 | 40.3 | 27.3 | 13 | 5.2 | 7.8 |
| 3 | I need linguistic support to overcome reading challenges | 5.2 | 29.9 | 26 | 19.5 | 5.2 | 9.1 |
| 4 | The linguistic support I receive from INTO helps me overcome my reading problems | 0 | 32.5 | 20.8 | 7.8 | 6.5 | 27.3 |
| 5 | My friends who have the same first language are helping me to overcome my reading difficulties | 0 | 22.1 | 24.7 | 23.4 | 14.3 | 10.4 |
| 6 | Facebook group is facilitating factor that helps me cope with reading difficulties | 0 | 7.8 | 15.6 | 35.1 | 11.7 | 24.7 |

The use of Facebook groups to cope with academic reading difficulties was investigated in the second phase of the research and 36 students

disagreed with the relevant item, outnumbering those who agreed, suggesting that use of Facebook groups was not common among students in different disciplines.

Additionally, while some participants were able to find linguistic support on the internet, others received linguistic support at an English language institute. This was examined with survey respondents, who were asked whether they found the linguistic support they received helpful in overcoming reading problems with those who agreed (25 students) outnumbering those who disagreed.

Elie emphasised the integration of so many international students in the English language institute environment and how this permitted the students to share knowledge with each other as they had the same challenges. Such an environment allowed them to ask freely about what they found difficult:

I ask for help from English language Institute, I take part in two modules, one is for academic reading and one is for academic writing and the class you know the students are from different countries so English is not all of us first language. I have a lot of problems so in the class we can ask the tutor different questions. They can also share me some methods to help some to read articles so I think it is really helpful. I remember yesterday students from Indonesia share with us a website for reading club and I think it is really helpful. (Elie, Interview 1)

Omar also thought that the English language institute linguistic support was very helpful. His view was mostly related to the possibility of receiving feedback at the institute; an advantage that he did not have in the modules:

Yes of course it is helpful, because we spent lots of time reading and we do not know whether we are doing well or not so these sessions support us and encourage us to continue and we have opportunities to consult the tutor themselves as we do not have this chance with our lecturers. (Interview 1)

Here, Omar touched upon another advantage of an English language institute which an academic programme may lack, namely the constant feedback that can help students to understand their deficiencies and work towards overcoming them.

Regarding the linguistic support that students receive before enrolment in their academic programme, Elie was one of the international students who achieved the required score in the IELTS and therefore was not required to enrol in a pre-sessional course, but still wanted to do so. She believed that all international students would benefit from taking part in the course. When asked if she wished to receive any kind of linguistic support, Elie replied:

Oh, yes, the pre-sessional course, this was really helpful. Some specific courses like politics and the law I think it is really difficult for students from other countries to understand articles at their first couples of months so I think the university should ask all students from other countries to enrol in the pre-sessional course. (Interview 1)

Survey data supported this view, as 32 students agreed that pre-sessional courses are important for all international students, even those who have achieved the required IELTS score, whereas only 12 students disagreed.

Seeking help from colleagues who are happy to share their experiences was another factor. They may be students who share L1. An example of this is what Dan talked about in the first interview: ‘*My friends who speak Mandarin, they really help me by explaining in Mandarin. I have very good British friends who speak slowly so that I understand*’.

Nonetheless, survey data did not support this view as the number of respondents who disagreed with the item in the survey ‘*My friends who have*

the same first language are helping me to overcome my reading difficulties' (29 respondents) outnumbered those who agreed. On the other hand, there was support available for students from other international students, not necessarily students who share a first language. In this regard, Omar commented: *"Maybe sharing discussion with group like what we have in the institute"*. With regard to the item that asked if other international students are helpful in overcoming reading challenges, the respondents who agreed (32 students) outnumbered those who disagreed, thus indicating that help is available from other international students and not necessarily those who share the first language.

When asked about the kind of support that they would like to receive, participants mentioned further linguistic support at the university, such as a tutorial session that would discuss techniques in academic reading. As the students suffered with regard to the time they had to spend on their reading, they thought that it would also be beneficial to be trained in how to read more quickly: *"Yes, how to understand a long passages in a very short time, I think I will ask them what is the strategy"* (Sara, Interview 1). In a wider community of ESL students at the same University, 27 respondents to the survey agreed that they needed linguistic support to overcome reading difficulties, outnumbering those who disagreed.

4.7. The multidimensionality of academic reading difficulties

Academic reading experience was not a seamless experience for postgraduate students in the first phase. The academic reading difficulties they encountered were connected and deeply affected by some other dimensions. That means even when students discussed other aspects of academic reading like reading practices and their perceptions about English language proficiency, they indirectly discuss the difficulties of academic reading. To exemplify, when

Omar was asked about reading low volume of pages for academic purposes, he answered, *"Yes, because it takes long time"* (Interview 1). This can be taken as indication of the extent to which reading was difficult and tedious for him as the number of pages read was very small compared to the times he reported reading.

Students' inability to handle reading loads was another indication of multidimensionality of academic reading difficulties. Omar commented on his inability to read large volumes, *"... not only the time because it is long and I am slow but also it is hard to understand"* (Interview 1). Here, he shed light on difficulties resulting from the time needed to read, length of texts, and his inability to read efficiently. All these reasons contributed to make Omar unable to handle reading loads. Another example was given by Nora when she stated, *"... it is too much for me, I mean like sometimes I feel tired of reading things I do not know where it is heading to"* (Interview 1).

Additionally, in an evidence that students were unable to read efficiently and finish their reading in a reasonable time, they reported that they need to read a single text many times. Sandy explained, *"Actually some important articles, I will read at least twice and the first time I read one by one ... I spend a lot of time to read"* (Interview 1). This indicates how academic reading difficulties were connected and being reflected by reading practices.

Students reported that they developed strategies to overcome their difficulty. They adopted the strategy of being selective in reading only some texts of the suggested reading lists or they tried to handle their reading load through the help and guidance of their academic tutors.

Academic reading difficulties that students encountered were also connected to their English language proficiency. Students indicated that changes over time in English language proficiency, in effect, alleviated some of the academic reading difficulties. The following quote from the first interview by Reem discussed how changes in vocabulary knowledge, as one dimension of English language proficiency, enhanced her reading experience making her read faster; *“at the beginning I feel that I am a little bit slow,”* but later added, *“Yeah, because I do not understand a lot of vocabulary I am slow reader, but when I read and understand a lot of vocabulary then I will read faster”*.

Chapter5: Discussion

In this section, I present the findings of this study and their meaning in the wider ESL context of learning but first I revisit the research problem. In two separate phases, the present study investigated many questions in relation to academic reading for ESL students. The first phase focused on the academic reading practices of ESL students and how students perceive their English language proficiency. Academic reading difficulties and the strategies students utilise to cope with these difficulties were also explored as well as the changes over time in students' perceptions about their academic reading difficulties. In the second phase, the focus shifted to investigating the generalisability of the first phase findings. Furthermore, the relationship between students' English language proficiency and their perceived level of academic reading difficulties was also investigated in the second phase.

5.1. Academic Reading Practices of ESL Postgraduate Students

The present study reveals an in depth understanding of the ESL postgraduate students' experience with academic reading. The findings indicated that students varied in their reading frequency and the number of pages they read each week, as was expected. In addition, the study measured the amount of reading in which they engage by asking them how often they read for academic purposes and how many pages they read per week. For some, the number of pages they read was very small compared to the times they reported they spent on reading. Omar, for instance, though he reads every day, is able to read less than 30 pages. Similarly, Reem reads three times a week and can only finish 5 to 10 pages. This finding that students read low volumes approximates to one of the salient findings of Sheorey and Mokhtari's

(1994) study investigating undergraduate students' reading habits for academic and non-academic purposes in a non-ESL context; they found that the time college students spent reading for academic purposes was very low.

The finding that students read low volumes compared to the time they reported they spent on reading is alarming because, in the academic context, reading is a key skill by which students can improve their academic knowledge. Thus, students with difficulties in reading face 'a major barrier to learning' (Manarin, Carey, Rathburn, & Ryland, 2015, p. 1). If the causes of reading low volumes are to be analysed, then students' awareness of the key role of academic reading is excluded because, in this study, participants were aware enough of its importance and how it affects their learning, as evident through their perceptions of academic reading, which are discussed in Chapter 4, wherein it is clear that they value academic reading and understand its importance. Thus, one possible interpretation for such a case is that they face a diverse range of difficulties, especially if we take into account that some students reported reading the same text more than once, resulting in reading low volumes of academic texts.

Another major finding related to reading practices is that students show a divergence between reported data in the interviews and observed data in the think aloud reports regarding the process of reading. Simply put, most of them were not doing what they say they would do when they read for academic purposes. They specifically mention a wide array of strategies that can be implemented to read for academic purposes, but they do not implement them when reading in the think aloud sessions. Two possible interpretations should be considered. First, it may be that think aloud sessions do not resemble a normal context of reading academic texts. In the think aloud session, students

do not have certain tasks in mind when they read the texts; therefore, they read from the beginning to the end of the selected texts. A more plausible interpretation would be that students show varying levels of awareness of the reading strategies that would help them read efficiently. As in the case of Dan and Nora in the second think aloud sessions, they could read selectively and acted consistently with what they said about the academic reading process. They were also able to do so even without a specific task in mind.

Another finding related to students' reading practices is their dependence on the reading lists lecturers suggest for completing their assignments. Only one student (Sara) in the first round read to familiarise herself with research areas; all the others' readings were guided by assignments. Therefore, students only read for functional reasons; in other words, they only read to complete assignments. However, in the second round of interviews, when they had purposes for reading other than doing assignments (e.g. applying for PhD programmes at the university), they reported expanding their reading to include other resources. A closer look at students' practices is necessary to understand why postgraduate students' readings are confined to reading lists used to complete their assignments. Students, understandably, find it challenging to handle the required reading because they struggle to read even one text; it would not be easy to spare more time to read to familiarise themselves with the research areas. This finding concurs with the results of other studies; for example, Sheory and Mokhtari (1994) investigated academic and non-academic reading practices of undergraduate students in a non-ESL context and found that students read for functional reasons (for utilitarian reasons). Similarly, in an ESL undergraduate context, Auerbach and Paxton (1997) found that students read for functional reasons.

Students also noted that they found handling reading loads challenging. This difficulty stems from being unable to read efficiently as they reported that reading requires considerable amounts of time and they read given texts more than once. This finding suggests that students are unfamiliar with how to approach academic texts. Given that most students had just started using English in academia (having completed their bachelor's degrees in their first languages), and in light of the fact that they lacked some skills, it was not surprising to discern that they cannot handle reading many resources. However, students relied on a multitude of strategies to compensate for their inability to handle reading loads. First, most of the reported changes in the reading process over time revolved around reading selectively: students became aware of its importance as a strategy; however, most of them did not apply it in the think aloud sessions. It seems that some of them acquire this skill after being immersed in academic work and interacting with others. For example, as early as the first interview, Elie indicated that, based on her academic tutor's advice, she would be a more purpose-oriented reader before she decided to read any section of a given academic text. This implies she would be more selective at the micro-level when reading parts of any academic text. She suffered before she received that piece of advice, but interacting with others in the academic context drew her attention to the importance of reading selectively, although she failed to show how to read selectively in the think aloud session. In addition to reading selectively by choosing specific parts of the article to focus, others reported selecting only some items from the reading list. The finding that students' read selectively corroborates the findings of Hirano (2014), where a group of undergraduate students in an ESL context relied on this strategy to overcome this difficulty.

Second, seeking help from a supervisor was another strategy students implemented to cope with large quantities of reading. Specifically, supervisors or tutors helped students select what to read. As previously mentioned, Elie explained how her academic tutor helped her think about options in advance before deciding what part to focus on. Similarly, Hirano (2014) found that tutor-supported reading was a strategy used by students. McKee (2012) concluded that a group of international students at both the undergraduate and postgraduate levels valued the help they received from their subject tutors. Shen (2013) found similar outcomes with a group of undergraduate EFL students working to overcome reading difficulties. Some of these forms of help relate to what Kwan (2009, p.184) called 'coaching reading in the form of reading list'. In Kwan's study, supervisors' help was considered scaffolding as it helped a group of PhD students in a non-ESL context to decide on disciplinary literature for their theses. This finding is further indication of students' lack of awareness of how to approach academic texts and what to focus on.

Third, having large quantities of reading catalyses a participant to confine her reading to PowerPoint presentations of the lectures as an alternative resource to understand the content of the reading resources. Indeed, Hirano (2014) referred to this strategy that students developed to overcome reading challenges, although the students in Hirano's study did not use PowerPoint slides as an alternative to the required reading resources, as is the case of the participant in the present study, but rather as a guide to choose what to focus on in the required reading.

An important part of reading practices touches upon the sources of reading preferred by students. The present study's sample in the first phase were all master's degree students (except for one undergraduate in his last year

in an exchange programme) and some students preferred journal articles; this preference could be attributed, so they believed, to their reliability, their adherence to their learning style, or ease of access. The preference for a specific source of reading was also investigated with a large group of students in another UK university (Weir et al. 2009). The current study's finding of postgraduate students' preference for journal articles is in line with what Weir et al. (2009) found, if we consider the level of study (i.e., postgraduate or undergraduate) in the analysis, regardless of the status of English as a first or additional language. In Weir et al.'s (2009) study, postgraduate students considered journal articles to be more important sources of reading. However, because the study contained different subsamples, the researchers found that students with English as an additional language, regardless of their level of study (i.e., postgraduate or undergraduate), preferred books. The same applied to first-year students in that university. Thus, the present study's finding supports that of Weir et al. (2009) if we consider the level of study as postgraduate or undergraduate students, but contradicts their finding if the year of enrolment in academic programme and English language status as first or additional language are considered. Students show different levels of awareness of sources of academic reading, and some are prepared to read any source, whether it is a book or journal article in soft or hard copies.

To conclude, the ESL academic reading practices of postgraduate students are similar to those of students at undergraduate level that have already been discussed in other studies in other ESL contexts. But what the present study, uniquely, throws light on is the ESL postgraduate students' level of awareness of how to approach academic texts and how to apply strategies that would help them read efficiently. Furthermore, the divergence between

what the participants in this study said they would do when they read for academic purposes and what they actually did shows their inability to engage in academic reading efficiently and that brings to the forefront the readiness with which ESL postgraduate students come to academia and the extent to which they are well aware of study requirements.

In light of the various practices discussed, it is necessary to highlight students' process of adapting to academia. This adaptation is evident in the form of students' reported changes over time in the second round of interviews in relation to their academic reading practices. These changes include the increased frequency of academic reading, the increased number of pages students read per week, an improvement in the process of approaching academic texts, the development of strategies to handle reading material, and varying the purposes of academic reading. Although these students came to the university insufficiently prepared to pursue their studies in a UK university, they are capable of showing that they have learnt through experiences, as is evident in the changes they reported or demonstrated.

In the present study, reading as part of academic literacy is framed by sociocultural theory. Thus, reading is not viewed as learning an autonomous skill (Pérez & McCarthy, 2004) but is rather conceptualised as a social practice which is socially and culturally situated (Lea & Street, 2006; Pérez & McCarthy, 2004). Consequently, it is affected by the social context in which it occurs (Gee, 2008; Pérez & McCarthy, 2004). Therefore, if we want to understand reading, it is essential that we consider not only the text but also the aims, purposes, audience and context that frame the reading activity (Pérez & McCarthy, 2004). In such a sociocultural context, ongoing participation results in human development (Rogoff, 2003). It can be described as scaffolding, in which either

explicit or implicit assistance is considered a requirement for human development (Lantolf & Thorne, 2000). Building on Vygotsky's theory, Rogoff (2003, p. 38) proposed an approach in which she perceives human development as 'a process in which people transform through their ongoing participation in cultural activities'. Students in the present study were able to learn and develop academic reading skills through their interactions in the academic context. Different forms of interactions could lead to reading skill improvement. As the data suggest, such forms can be direct or indirect. Some students reported seeking help from their supervisors or tutors and improving accordingly, for example as in Elie's comments; others, such as Dan, discussed the effect of being engaged with the class in discussions critiquing a given text. He reflected on how classmates' answers and the lecturer's comments helped him figure out what it means to critique a paper:

I struggle to understand but we need to post the comments so I will post things like 'oh I have similar experience' or 'this one is a research in US. If it is done in Malaysia, it might be different. 'I find drinking tea with two hands or two hands is very different'—I will post this, but other classmates, they were saying that there were some flaws in the statistics, some flaws in some other things. Then we go to class discussion and write down what they say and then at the end I write it, so I do not think it is from me myself. I think it is from them ... so I am like copying what they say, especially when the lecturer adds a comment, I will be like [gestures that he is writing quickly] writing down. Then there will be like lecturer recordings. They talk too fast, so I go back to a lecturer's recording and replay it so that I will be like tick down what he says. And according to my limited understanding I will just apply that into my assignment. I still cannot understand why they can just read and they can critique. I cannot really understand that. (interview 1)

Dan's interaction with classmates and lecturers' comments represent the sociocultural approach to academic reading. According to Gee (2008, p. 44), when a learner acquires the ability to read a specific text, this skill is 'acquired as one's being embedded as a member of social practice wherein people not

only read texts of this type but also talk about such texts in certain ways, hold certain attitudes and values about them and socially interact over them in certain ways’.

5.2. Students’ Perceptions about their English Language

Proficiency: ‘*My English language proficiency is not high but enough!*’

The present study’s participants doubt the adequacy of their English language proficiency; they believe that they are not at a high enough level to study in the UK. The IELTS scores of participants in the first phase ranged between 5.5 and 7 overall and 5.5 and 8.5 on the reading module. Similarly, in the second phase, among those students whose overall IELTS scores ranged between 5 and 8.5 and whose reading module score ranged between 4.5 and 9, 42.9% were not satisfied with their English language proficiency when they first arrived in the UK. Students in the first phase who achieved below the required IELTS score were understandably sceptical about their English language proficiency, even though they attended the intensive English for academic purposes course before they started their academic programme. They were uncertain of the ability of IELTS to indicate a student’s high proficiency. This issue was raised by Sandy, who enrolled in courses to prepare for the IELTS in her country. She described the course as one that aims to improve the score through the use of certain strategies, but the students’ knowledge level remains low.

Overtime, and in the second round of interviews and TAP sessions, some students, including those with low scores, were satisfied with their English language proficiency. Unexpectedly, some of those who achieved the required IELTS score (e.g., Dan and Elie) were less satisfied with their English language

proficiency than lower scoring students. This can be attributed to them being more aware than the lower scoring students of study requirements and how their achievement might be affected by English language proficiency.

The present study finding that students' perceptions about their English language proficiency when they first arrived in the UK were generally negative contradicts that of other studies. Other studies which investigated students' perceptions in their first year of study but at different points of time of their academic programme found that the students were generally positive about their English language proficiency. Kerstjens and Nery (2000) investigated a group of international undergraduate students in an Australian university to gauge their perceptions about their linguistic proficiency. During the second or third semester of their first year, most of the 16 students who participated in that study were positive about their English language skills, regardless of their achievement on the IELTS. At the same time, most agreed that they needed a higher IELTS score, indicating that they thought their English language proficiencies were only just adequate. Similarly, Elder et al. (2007) found that six out of seven undergraduate international students at a university in New Zealand were also positive about their linguistic ability and described it as adequate. Students' perceptions of English language proficiency have also been assessed in different ways. For example, a recent study by Arrigoni and Clark (2015) surveyed a large group of undergraduate ESL students at the American University in Cairo, asking them to rate their English language ability compared to others in class. Three quarters of the students were confident in their overall English language ability and rated themselves as the same as their peers in terms of their overall ability. Nonetheless, when it came to the different language skills, most students rated themselves as weaker than their peers.

This was justified by the students demonstrating different abilities in different skills. As previously indicated, the contradiction between the present study's findings and those of these other studies may be related to the specification of the period in which the present study participants had to describe their English language proficiency (i.e., they had to describe their English language proficiency upon first arrival to the UK). Other studies' participants may have been reflecting on their English language proficiency during their first year in general and not specifically referring to their English language proficiency when they first arrived in the UK. Thus, many changes may have occurred in their perceptions over time. This contradiction can also be understood in light of the present study's participants being postgraduates with higher study demands that affect them more significantly compared to the undergraduate participants in the other mentioned studies.

Considering the change over time, most of the first phase participants remained dissatisfied with their English language proficiency whereas 79.2% of the second-phase participants agreed that their English language proficiency had improved. Another indication of the improvement that second phase participants perceived in their English language proficiency can be inferred by comparing their responses to the two items in the survey that asked about their English language proficiency when they first arrived in the UK and at the time of completing the survey. The number of participants who agreed that when they first arrived in the UK their English language proficiency was not at an adequate level to study in the UK outnumbered those who disagreed. Furthermore, with regard to the item that reads '*I feel now that my English is at a better level to study in the UK*', 61 respondents agreed. This suggests that they had noticed the change over time.

This paradox between the first- and second-phase results could also be attributed to the time of year in which these two groups of participants responded to the questions. The first-phase participants might have responded to the question differently had they been asked later in the academic year, like the other phase group.

These findings suggest that, although students' perceptions about their proficiency were negative when they first arrived in the UK, they changed over time and this improvement may be attributed to them being immersed in academic study. Changes were also evident in the sample from Auerbach and Paxton's (1997) study, where they interviewed a group of undergraduate ESL students and reported changes in the later interviews. Moreover, the present study participants' perceptions about academic reading also strengthen the findings that they have improved their linguistic proficiency after being immersed in academic study. Students valued academic reading as they deemed it to be rewarding to their English language proficiency in three respects: vocabulary knowledge, reading speed and writing skills. At the core of these gains was the vocabulary knowledge increase, as they reported that it worked as an input for new vocabulary, which in turn helped minimize the ramifications of the lack of vocabulary knowledge. Other studies have also reported similar gains from changes over time. For example, Craven (2012), investigating a group of undergraduate international students in the University of Technology in Australia, found that students had shown some improvement in their IELTS test, particularly in reading and listening, suggesting that these gains in reading can be attributed to the reading that students did for their degrees. In another study, with undergraduate international students at another Australian university, Humphreys et al. (2012) came to the same conclusion

after tracking students' proficiency over a period of time. In addition, participants in this study noticed that reading speed increased and their writing skills were enhanced. The increase in reading speed was also mentioned in Humphreys et al.'s (2012) study. Moreover, as reading is the main source of academic disciplinary knowledge, in that sense it inspires students to generate ideas, thereby contributing to the overall enhancement of students' writings. These gains are manifestations of how students' proficiency has changed over time after being engaged in academic study, regardless of their English language proficiency as measured by the IELTS.

Although the present study's findings can serve as evidence to suggest that a large group of ESL students come to academia insufficiently linguistically prepared regardless of their IELTS achieved score, this should not be understood as a call to increase the minimum level of English language requirements of entry into the university, for two reasons. First, the present study findings suggest that some students were able to achieve the required IELTS score and, in some cases, to exceed it, but they still felt that their linguistic proficiency was insufficient to function comfortably in the university. Second, in line with the model that has been suggested by Murray (2010a, 2010b, 2013) that international students' needs should be conceptualised as comprising three different competencies, distinguishing between linguistic proficiency and the other important competencies that include academic literacy skills and professional communication skills, the present study findings can be seen as an instantiation of Murray's model in the sense that English language proficiency is not the whole issue, as students' academic experience is largely affected by lacking other skills, namely, academic literacy skills. Therefore, it can be concluded that increasing the minimum level of English language

requirements would not necessarily result in all the ESL students' problems being solved, as they have issues resulting from lacking other skills. Nonetheless, students' English language proficiency needs to be improved and such a situation highlights the importance of English for academic purposes courses that are offered as either preparatory courses or concurrently with the academic programmes. Regarding preparatory courses or in-session courses, one possible implication is that institutions encourage enrolment in these courses and make them available for all students. Confining such courses to those who fail to achieve the required IELTS scores would exclude students with high IELTS scores and other students whose first language is English from an academic experience that could add to their skills. Indeed, this was suggested by Elie, who had already achieved the required IELTS score and therefore did not have to take an intensive language course before the start of academic programme but was willing to join that course. Later, 41.6 % of the survey respondents agreed to the item about joining pre-session courses, suggesting that this would be welcomed in a larger group of ESL students. In addition, survey data indicated that 32.5% of participants agreed that the English language support they received from the English language institute helped them overcome their reading problems. These two findings are important because they discuss the linguistic support that students might need.

Another important issue needs to be highlighted regarding the linguistic support that students receive. Quality concurrent linguistic support that caters for different students' needs within different disciplines should also be available for ESL students to enhance their academic experiences. Survey data supported this as 35.1 % of participants agreed that they need linguistic support to overcome reading difficulties.

5.3. The Association between Students' English language Proficiency and their Perceptions of Academic Reading Difficulties

Regarding the total perceived level of difficulties computed based on the second phase participants' responses to the scale, the results revealed that international postgraduate students appeared to encounter a moderate level of difficulties when reading for academic purposes (mean = 77.28, SD = 13.13, whereby the total can lie between the two values 0 and 115). The total perceived level of difficulty was correlated with the participants' IELTS scores to identify how students' English language proficiency affect their perceptions of academic experience. The results revealed a negative significant medium correlation between IELTS overall scores and the total perceived level of academic reading difficulties ($r = -.31$, $p < .01$). Similarly, there was a negative medium but significant correlation between reading module scores in IELTS and the total perceived level of academic reading difficulties ($r = -.4$, $p < .01$). As the correlation between the IELTS scores and the total perceived level of difficulty was negative, this suggests that the higher students scored on IELTS, the lower the level of difficulty they encountered.

Before discussing this finding in the wider context of previously conducted studies that investigated the relationship between English language proficiency and students' academic experience, two major differences between the present study and other studies need to be taken into account. First, the relationship between English language proficiency (as measured by IELTS) and students' academic experience has been investigated in various ways, by correlating IELTS scores either to the students' GPA or to the students' performance in the pre-session course; they also compared students'

university performance to their scores or compared students at different levels of English language proficiency based on what they believed to be difficult while they read. However, except for Cotton and Conrow's (1998) study, which investigated the correlation between IELTS and the level of difficulty experienced by students with language-related course work tasks, none of these studies investigated the importance of English language proficiency by correlating the IELTS scores to the total perceived level of difficulties of academic reading, as is the case with the present study. Second, the relationship between IELTS scores and the various measures of students' performance in the IELTS predictive validity studies were mostly positive in most of these studies, suggesting that the higher students scored on IELTS, the higher their GPA or other measures of performance. As such, the present study investigated the relationship between English language proficiency (as measured by IELTS) and the students' academic experience in terms of its relationship to students' perceptions of academic reading difficulties. Therefore, it was assumed that the higher students score on IELTS, the lower the level of difficulty they experience.

The present study finding suggesting that IELTS is a moderate predictor of students' experience in academia concurs with the findings of a number of studies conducted in other contexts with international students. For example, Dooley and Oliver (2002) investigated the relationship between 65 students' IELTS scores and their averages of two semesters. A moderate correlation was found only between IELTS reading module scores and the students' averages of the second semester. Similarly, Cotton and Conrow (1998) examined the relationship between 33 students' IELTS scores and their GPA; IELTS (global) correlated negatively with students' GPA, whereas IELTS reading module

scores bore a positive medium correlation with GPA. Similarly, Arrigoni and Clark (2015) found a medium correlation between the final reading examinations and IELTS overall scores.

Bayliss and Ingram (2006) concluded that, based on their evaluation of 28 students' academic work in the four skills, students' performance was close to their actual IELTS scores and IELTS predicted students' language behaviour at the university. Additionally, with an emphasis on students' spoken and written production at the university, Paul (2004) found that the four students he studied used the same level of English as their IELTS scores indicated.

Additionally, the finding that IELTS is a valid predictor is consistent with what Ushioda and Harsch (2011) found when they investigated the correlation between the IELTS scores and course work of 95 postgraduate students in a pre-session course. They found a large correlation among IELTS overall scores, reading module scores and the course work. The correlation was high and significant, which could be attributed to the nature of the pre-session course and its requirements, as it was a linguistic course that may not necessarily have resembled what students would be involved with when they started studying in their disciplines.

Moreover, Humphreys et al. (2012) worked with 51 undergraduate students' scores and found that IELTS correlated with their GPA in only the first two semesters. Weir et al. (2009) also concluded that IELTS was a predictor because significant differences emerged between different groups of students when they were divided according to their IELTS scores in the difficulties they encountered while reading.

This study finding that IELTS is a meaningful predictor is also consistent with the study of Schoepp (2018), in which the GPA of a group of 953

undergraduate students correlated moderately with their IELTS scores. Yixin and Daller (2014) also found similar results when the GPA of 60 postgraduate Chinese students was found to moderately correlate with their IELTS scores.

To conclude, the present study's finding that students' English language proficiency (as measured by IELTS) is a valid moderate predictor is consistent with the findings of a number of studies that have investigated the predictive validity of IELTS. At the same time, the finding suggesting that English language proficiency is a moderate predictor of students' experience in academia partially contradicts Cotton and Conrow's (1998) finding from examining the relationship between IELTS and the performance of 33 students, as it was calculated in different ways: GPA, staff ratings, and students' ratings. When students were asked to rate themselves at the end of the first semester, their ratings correlated negatively with IELTS scores (global) and reading module scores. This is the only part of the study's finding to contradict that of the present study: that IELTS is a valid predictor. However, when the correlation was calculated in the second semester, the result revealed a positive correlation between IELTS and students' self-rating.

The moderate predictive validity of English language proficiency that this study has revealed suggests that English language proficiency is of critical importance in ESL students' academic experience. On the part of universities, the factor of English language proficiency can be controlled in two ways in order to enhance ESL students' experience in academia. First, while screening international postgraduate students for admission, ensuring that they have met the English language level required for their respective majors is essential; this can help students operate adequately. Second, students' experience could also be enhanced through the introduction of English language support. Ensuring

concurrent support through the whole period of the academic programme and not confining it to the pre-sessional courses may help students overcome any difficulties that result from a lack of English language proficiency. ESL students come from different backgrounds and will be joining various disciplines; they also have to deal with different academic material and, consequently, the tasks that they have to tackle are different from one major to another. This disparity of needs among ESL students necessitates conducting needs analyses before administering English language support.

In a wider circle, on the part of the EAP courses designers, more emphasis can be given to reading skill courses so that students can be equipped with the skills needed to tackle prospective academic reading tasks. Having said that English language proficiency plays an important role in students' academic experience does not mean that it is the only factor that affects students' academic experience. This was apparent in this study through the revelation of a wide range of difficulties when reading for academic purposes, and these difficulties do not have solely linguistic origins, as some academic reading difficulties result from a lack of other academic skills. This indicates that other factors come into play in making academic experience not only affected by English language proficiency. In the literature, Dooley and Oliver (2002) support the argument that academic performance is complex and therefore success or failure in higher education is not only attributed to language proficiency. This is confirmed by the finding of Lloyd-jones et al. (2007) that a number of participants in their study had to resubmit their theses because of non-linguistic issues. The acknowledgement of the effect of other factors can also serve as instantiation of Murray's model, in which international

students' needs are not confined to linguistic proficiency; rather, they need to be competent in other skills to help them perform well at university.

5.4. Conceptualising ESL Students' Readiness to Pursue their Postgraduate Studies in International Universities

Students in this study reported various academic reading difficulties, primarily due to a lack of linguistic proficiency or a lack of academic skills. However, an overlap exists between these two categories in the sense that some difficulties (e.g., lack of vocabulary knowledge) are caused in part by a lack of both linguistic ability and academic skills. These difficulties that ESL students encounter when they read for academic purposes, whether caused by a lack of English language proficiency or a lack of other academic skills, bring to the forefront their readiness to pursue their studies in international universities. This situation points to a gap between students' skills and the skills needed to perform the academic work. These findings largely reinforce other studies' conclusions about students' readiness, namely, that a disconnect exists between the skills they have acquired and the skills needed to operate successfully in higher education (Briggs, Clark, & Hall, 2012; Conley, 2007; Lowe & Cook, 2003; Wasylikw, 2016). However, research has focused on how to facilitate students' transition from high school to college study in a non-ESL context; in the current study, participants are not transitioning from high school to college as they are pursuing their studies at the postgraduate level.

In this study, students' readiness is defined as the level at which ESL students are prepared with the necessary skills to undertake postgraduate studies without any anticipated difficulties that might negatively affect their academic performance. These fundamental skills include English language mastery and other skills, such as background knowledge and the ability to read

critically. Therefore, students' readiness is multi-dimensional and can by no means be linked solely to linguistic proficiency. Conley (2007, p. 5) defined students' readiness as:

the level of preparation a student needs in order to enrol and succeed—without remediation—in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program.

Conley (2007) clarified this idea by sketching a model to identify various facets of college readiness, including key cognitive strategies, key content, academic behaviour, and contextual skills and awareness. According to Conley (2007), these facets are meant to be interconnected.

The present study's participants reported a wide array of academic reading difficulties that could be attributed to a lack of the skills mentioned in the three inner circles of Conley's (2007) model (i.e., key cognitive strategies, key content and academic behaviour). The context in which Conley sketched his model was not an ESL context. In his model, he mentioned that the knowledge of English and the knowledge of world languages were two parts of what he called key content. Thus, neither of these two types of language-related content knowledge were meant to refer to the use of English as a second language. Given the fundamental role that English language proficiency plays in ESL students' academic experience, and keeping in mind Murray's (2010a, 2010b, 2013) model that considers English language proficiency to be one of the competencies that international students need besides academic literacy skills and professional communication skills, I suggest making slight changes to Conley's (2007) model to conceptualise ESL students' readiness to pursue their studies in an international university. This is indicated in Figure 9.



Figure 9. Multi-dimensions of ESL students' university readiness

Table 15 indicates each dimension and what it means. This list of skills is not exclusive. The skills mentioned are selected based on the current study's findings.

Table 15

Multi-dimensions of ESL university students' readiness

| Dimension | Its meaning |
|---|---|
| Key cognitive skills | Ways of thinking: analysis, criticality, evaluation. |
| English language proficiency | Students' mastery over English language, the ability to read and write, communicate in English, understand, and make themselves understood. |
| Key content | Background knowledge. |
| Academic behaviour: study skills | Skills including time management strategies and note taking and other study skills. |
| Contextual skills and professional communication skills | Skills of being able to understand others and make themselves understood while communicating in academic context. It also refers to the awareness of academic norms of communication. |

As seen in the wheel-shaped model, Figure 9, all five dimensions have the same weight, meaning they are equally important and should all be promoted. If some parts are ensured while other parts are overlooked, the wheel would not move smoothly; likewise, ensuring and promoting students' readiness with regard to English language proficiency while the other dimensions remain overlooked would not necessarily end in easing all students' difficulties.

Another characteristic of the readiness dimensions in this model is that they are interconnected; they affect and are affected by each other. For instance, English language proficiency affects students' background knowledge; background knowledge, in turn, affects students' key cognitive skills — criticality, in this case — and this is applicable to other dimensions.

When discussing the issue of ESL students' lack of readiness to pursue their studies in international universities, it is important to consider the factors that cause these students' inadequate preparation. These factors can be classified as educational factors and operational factors. Educational factors refer to the inadequacy of ESL students' EAP courses completed before joining international universities. Although students' previous academic experience was beyond the scope of the present study, the inadequacy of these courses was apparent through the difficulties that they encountered. Through the revelation of the ESL students' difficulties in other contexts, doubts have been raised about EAP courses (Evans & Green, 2007; Evans & Morrison, 2011). The ESL students in the present study were insufficiently prepared for linguistic and academic demands. What makes the problem worse is that this lack of readiness is not usually diagnosed. The current admission measures that universities use to admit ESL students into academic programmes are limited; they tend to focus exclusively on English language proficiency and overlook other important academic skills. This can be considered the other factor that contributes to ESL students' lack of readiness: universities take a stance of practicality in not measuring skills other than English language proficiency to ensure students' readiness.

However, the gap in ESL students' readiness to pursue their studies in international universities can be addressed by providing constant linguistic and academic support. In addition, providing a supportive environment in which students can interact with others is valued (Briggs et al., 2012). Thus, based on the suggested multi-dimensions model, a number of recommendations are drawn for policy and practice, as discussed in Chapter 6.

The remaining section of this chapter discusses some of the reported difficulties that students encounter when they read for academic purposes, regardless of whether they stem from a lack of English language proficiency or a lack of other necessary skills. Also, the strategies students applied and the resources they made use of to cope with these difficulties will be discussed.

5.5. Academic Reading Difficulties

5.5.1. Lack of vocabulary knowledge.

Lack of vocabulary knowledge is considered by students a difficulty that hinders their understanding. This was verified in the second phase, as 53.3 % of the students agreed that it is the most difficult aspect of reading. 55.9 % of the second phase participants also agreed that unknown vocabulary affects their understanding. ESL students in various contexts have mentioned the same source of difficulty at undergraduate level. The studies that revealed this result will be grouped here according to the level of the students, whether solely undergraduate students or both undergraduate and postgraduate. At undergraduate level, in Auerbach and Paxton's study (1997) undergraduate students reported lack of English proficiency, namely grammar and vocabulary, as the greatest obstacle in L2 reading. Hirano (2014) also found that vocabulary was considered the main source of difficulty, Shen (2013) found that 94% of students attributed the difficulty in academic reading to vocabulary problems, and the study of Li and Chun (2015) found that both successful and less successful EFL Chinese readers at university level considered vocabulary to be a difficulty. Lack of vocabulary knowledge was also apparent in Evans and Morrison's (2010) study, in which they investigated a group of undergraduate students during their first term at university in Hong Kong.

This difficulty has also been found when the sample was a postgraduate level class, such as in the study conducted by Cheng (1996), where understanding unknown words was among the most required skills with which students had problems. Terraschke and Wahid (2011) found that unknown vocabulary knowledge was a reported problem of academic reading for a group of international students from various undergraduate programmes. Phakiti and Li (2011) also concluded with a similar finding when they studied a group of postgraduate students.

Other studies have also investigated reading at both undergraduate and postgraduate levels, such as the study conducted by Mckee (2012), where participants indicated that they were unable to process texts because of vocabulary issues. In addition to addressing the two levels, undergraduate and postgraduate, a study conducted by Weir et al. (2009) included both international and home students in a pilot open-ended questionnaire and found that the use of technical language posed a second difficulty in the reading of hard texts.

A more specific issue was pointed out by the students in the present study, namely the classification of words as academic or not. This issue was flagged in the first phase as some students thought they had difficulty with unknown words because they were academic. All the words that students reported as unknown when they read the think aloud texts were checked against the latest list of academic vocabulary created by Gardner and Davies (2013); not all of the words that students reported as unknown were academic.

Moreover, another important note that the present study helps highlight is that some vocabulary that students reported as unknown can be classified as technical vocabulary in the students' respective disciplines; this in turn posed a

problem for students, as 58.5 % of survey takers agreed that most of the words they found difficult are technical. Moreover, 76.6 % agreed that technical words are difficult, as they are not used in daily life. This confirms the findings of Evans and Morrison (2010): that lack of technical vocabulary knowledge was a main difficulty that EFL students experienced. Evans and Green (2007) also found that undergraduate students considered understanding specialist vocabulary to be one of the most difficult reading skills. Similar to the present study sample, a group of master's degree students in a UK university found understanding specialist English vocabulary one of the challenges they faced (Wu & Hammond, 2011). In contrast, Cohen, Glasman, Rosenbaum-Cohen, Ferrara and Fine (1979) suggested that non-technical words are the source of difficulty and not technical words, because they convey much of the meaning of texts. That study was conducted with four groups of students from different disciplines at a university in Israel. Although the present study findings do not contradict the view that ESL students find non-technical words difficult, as was reported by some participants in the first phase, in the second phase, it seemed that survey respondents found technical words to be a source of difficulty. In order to understand the discordance between the present study findings and those of Cohen et al. (1979), two major differences between the two studies need to be highlighted; first; the present study participants are ESL students in their first year at university, pursuing their studies in different disciplines, where technical words differ in terms of the level of difficulty and the weight dedicated to them; second, the present study participants are ESL students who joined this university after undertaking a standardised English language test, i.e., IELTS, and their scores in IELTS overall lay between 5 and 8.5. The participants are assumed to have acquired a specific level of vocabulary

knowledge, especially in relation to general words, whereas in Cohen et al.'s study, the details of the participants' previous academic qualifications refer to high school matriculation exams and the students' scores in English.

For students to comprehend the materials properly, it is not only the breadth of vocabulary knowledge that matters, but the depth of their vocabulary knowledge is also important, in the sense that awareness of different meanings of words and of derivational forms has a profound effect on their comprehension. Nonetheless, the survey data did not support this finding, as two thirds of respondents disagreed with the item *'if the text uses a different form of a word that I know (for example, include, inclusion, inclusiveness), I find this difficult to understand'*. This indicates that the use of derivations of one stem did not make it difficult for them to understand texts. However, the first phase finding that the use of derivations makes texts difficult to understand is in agreement with that of Schmitt and Zimmerman (2002), who investigated the productive vocabulary knowledge of a group of students, some of whom were ESL students. They concluded that students' knowledge of one derivative form of a word does not mean that students can use other derivative forms of the same word in their production. Indeed, Schmitt and Zimmermann (2002) investigated the productive knowledge of students, whereas the present study focuses on the receptive knowledge of the students, as it asked if they would find it difficult to comprehend a text with another derivative form of a word used. Schmitt and Zimmermann (2002) also reported that when their participants asked if they would classify words as part of their receptive knowledge in the Test of academic lexicon, ESL students of their sample classified half of the words namely 53% given to them as part of their receptive knowledge. This implies that knowing one word does not mean that other derivative forms of the

word will necessarily also be known by students, and this is similar to what students in the first phase of the present study reported. Schmitt and Zimmerman (2002) also posit that the students' knowledge of derivations is built incrementally, suggesting that the better their linguistic proficiency, the more derivational forms they know. For the present study, this could explain the contradiction between the findings of the first and second phase; 65% of the web survey respondents disagreed with the item '*if the text uses a different form of a word that I know (for example, include, inclusion, inclusiveness), I find this difficult to understand*', a result which can be attributed to the improvement in their linguistic ability, as they were asked to respond to the survey later in the academic year, unlike the participants of the first phase, who had just started their academic programmes.

To negotiate this difficulty, some students demonstrated and reported that they skip the unknown words. This seems to be the style of those who read more efficiently and are trying to obtain the gist without being worried about every word's meaning. Similarly, the strategy of skipping unknown words was also apparent with another group of ESL students but at an undergraduate level in the study conducted by Auerbach and Paxton (1997). The percentage of web survey respondents who agreed with the item '*while reading, I skip the words I do not know the meaning of*', was 53.3%, exceeding that of those who disagreed, indicating a popularity of that strategy among a larger group of ESL students. In addition, more than two thirds of the survey respondents, accounting for 77.9%, thought that they would do so because subsequent sentences might introduce explanations for the unknown words.

Conversely, those who were concerned about the meaning of each word could not form a mental representation of the text, as they were distracted by

unknown words and would check the meaning in a dictionary. More than half of respondents, accounting for 58.5% of the web survey, agreed that they would try to translate unknown words. This strategy also appeared in other ESL context studies, such as the work of Adamson (1990), Gonzalez and Gonzalez (1999), Humphreys et al. (2012) and Shen (2013).

There were also participants who would only check the meaning if it affected their understanding of the text rather than with every unknown word they encountered. Results of the second phase showed that 79.3 % of respondents agreed that they would do this, which corroborates what Shen (2013) found, in a study involving two groups of EFL undergraduate students and their use of strategies. It was found that the group that read more efficiently did not rush to check the meaning of the unknown words immediately they met them; instead, they would read, underline and then use the dictionary. This, according to the researcher, was attributed to the use by this group of various strategies at their disposal.

The type of dictionary that ESL students in the present study prefer to use is a mono-lingual one. They justified their choice in that the monolingual dictionary would be more accurate, particularly if there is no equivalent word in their L1 that would explain the meaning of the unknown word. This preference for use of a monolingual dictionary was validated in the second stage, as 41.3% of survey respondents agreed that they would use such a dictionary. This specific finding is partially in line with what Humphreys et al. (2012) found with a group of international undergraduate students in an Australian university, who reported the use of both mono- and bilingual dictionaries. Gonzalez and Gonzalez (1999), who investigated the vocabulary learning of a group of ESL undergraduate students in the U.S., indicated that, in a task where students

were asked to read articles and find five unknown words and write them with their meanings, students consulted dictionaries to write the definitions, although the task had not asked them specifically to do so as they could also guess the meaning from the context. The study did not mention whether they used monolingual or bilingual dictionaries, but it can be assumed that they used monolingual dictionaries and that this was not a matter of preference, as they had to write the definitions of the unknown words in English.

Understandably, it was reported by some students in the present study that the use of a dictionary can be confusing. An alternative strategy was suggested by Sandy, namely the use of YouTube videos, as this enabled her to utilise audio-visual clues to understand the unknown word. In a wider circle of international students at the same University, this was not preferred, as 54.6 % of survey respondents disagreed with the suggestion to use YouTube to tackle the difficulty of unknown words.

Instead of translation, finding the word definition in English through the use of dictionaries or websites such as Wikipedia, and finding synonyms, are also two strategies used by students, as supported by 75.3% of web survey respondents, who agreed that they would use these strategies.

With the easy access to, and convenience of, translation websites and applications, Elie suggested the strategy of translating the whole text into her first language, but she was aware of the inherent problems of this. In contrast, 63.7% of web survey respondents disagreed with the use of translation software to translate the whole text into their first language. Besides skipping unknown words and translating the text, participants also adopted a re-reading strategy to comprehend texts with unfamiliar vocabulary. This seems to be popular among

international students, with 85.7% of survey respondents agreeing with this item.

Regarding change over time, first phase participants mentioned that their vocabulary was increasing, and the difficulty of unknown words had been alleviated. This may be a result of students being involved in academic study, as has been discussed in the previous section.

Overall, it can be inferred that students' lack of vocabulary knowledge causes the academic reading experience to be difficult, regardless of their linguistic proficiency. They also reported that they used a wide array of strategies to cope with it, and, while some of these strategies apparently help, others appear to be just a waste of time.

5.5.2. Lack of adequate background knowledge.

Lack of background knowledge is a further cause of academic reading difficulty for ESL students, and can be considered one of the difficulties related to academic skills. If students lack prior knowledge of the content, they find it difficult to understand texts. This finding corroborates that of Samuelowics (1987), in whose study overseas students studying in an Australian university described their background knowledge as inadequate. Similarly, Hill et al. (1999), in their investigation of the academic success of 55 postgraduate and undergraduate students in Australia, found that background knowledge was one of the factors mentioned by the participants as affecting their academic success. Furthermore, in a report describing students' needs in the Faculty of Arts in a Canadian university (Meeting the Challenge, 2004, p. 22), although the report was not intended to diagnose ESL students' needs, it particularly shed light on the difficulties ESL students face, whether postgraduate or undergraduate, especially in humanities and social sciences disciplines, as the

language of these two disciplines is considered to draw on 'cultural fabric'; hence the difficulty. Similarly, Shen (2013) investigated a group of EFL undergraduate students in a technical university, who pointed at background knowledge as one of the reading difficulties they encounter. Hirano's study (2014) concluded with a similar result, with some undergraduate students reporting lack of background knowledge as a source of difficulty when reading for academic purposes.

There are many reasons for this difficulty. First, it may be a result of students' changing their area of specialisation, as in the case of Sandy, who changed her major from fine arts to education. It is easy to see how difficult reading can be for a student who is new to that area, especially with academic texts that introduce an advanced level of content appropriate for students at master's level. Second, some reading texts introduce complex content, and this makes reading these texts difficult even for those who have completed their bachelors' degree in the same discipline. In the survey, 57.2 % of the students agreed with the item '*I cannot understand some texts because they introduce an advanced level of content*'. Third, introducing culturally-specific details can cause difficulty in comprehension, as it requires students to be aware of contextual details; nonetheless, the survey data was not indicative in this regard, as an equal percentage of students agreed and disagreed with the item '*I cannot understand some texts because they introduce some cultural artefacts (contextual details)*'. Fourth, statistical knowledge is extremely important in various disciplines. So, the introduction of statistical details in academic texts makes reading challenging for students who lack this knowledge, affecting their comprehension, as statistics were considered a source of difficulty that required prior understanding of statistical tests and how to understand the interpretation

of results. However, in a wider context at the same University, survey data does not support this perception; this can be attributed to the data being collected from students enrolled in different disciplines, where statistics vary in importance.

Regarding the difficulty of lack of background knowledge, students noticed that they improved over time because they read more. Survey data support this, as 92.2 % of students agreed that the more time they spend in an academic programme, the more they understand issues and topics. To negotiate this difficulty, students reported the use of many strategies, the first of which involves searching for texts that introduce an overview of the focus. The survey data found that 63.6% of students agreed with the item '*I try to find easier texts that introduce the content*'. They also seek help from supervisors when they find the text difficult; however, in the survey data, 37.7 % of students disagreed with this item, a percentage higher than that of those who agreed. Similarly, for the item that students might seek help from a native speaker if they encountered difficulty caused by introducing cultural artefacts, survey data suggest that the percentage of students who disagreed was slightly higher than that of those who agreed. Some students also reported the use of L1 to familiarise themselves with unfamiliar topics, but the survey data was not indicative in this regard, as the percentages of those who agreed and disagreed were close to each other. Students also reported that they find academic reading easier after they listen to the lecturers' explanations during classroom discussion and 70.1% students of the survey respondents agreed with this item.

To sum up, lack of background knowledge is one of the academic reading difficulties that postgraduate students encounter. It is not directly related to students' English language proficiency and therefore it is overlooked in the

entry measures that universities use to admit students, which only focus on the linguistic abilities of applicants. This makes it a problem that is both undiagnosed and probably untreated by the university. This study helps reveal that ESL students might not be ready to pursue their studies in their selected majors due to lack of background knowledge. At the same time, it also elucidates the particular strategies ESL students rely on to overcome this difficulty in order to facilitate understanding the content of academic texts.

It is also worth noting that this kind of difficulty may not be unique to those students who use English as a second language; the same may also apply to other difficulties that are not directly related to English language proficiency.

5.5.3. Criticality as a new and significant issue.

Criticality was among the difficulties reported by students in the first phase, and, in the second phase, 52% of the participants agreed that it is difficult to be critical. This finding accords with what has been found in other studies that investigated the international students' academic experience at both undergraduate and postgraduate levels, e.g., Samuelowics (1987) and Hill et al. (1999) at the undergraduate level, and, at the postgraduate level, Evans and Stevenson (2010), Phakiti and Li (2011) and Son and Park (2014).

Students in this study indicated that this difficulty was partially due to them being unfamiliar with this concept, and, to that specific item in the survey, 50.7% of participants agreed that they are not acquainted with it. This accords with what was found by Cadman (2000), where a group of postgraduate international students indicated their lack of familiarity with this skill. This supports the notion that students' academic history affects the way in which they perceive criticality (Johnston, Ford, Mitchell & Myles, 2011): their previous

academic experiences focus on different academic practices and norms, of which the academic skill of being critical is not an important component. They gained this experience in different educational systems with different orientations and approaches to academic practices in general. For instance, some students come from other cultures where memorisation is valued and considered an important technique (Samuelowics, 1987; Carson, 1992; Volet, 1999), and a deeper engagement with texts, as criticality requires, may not be a familiar practice. However, according to Volet (1999), this should not be used to undermine the role of memorisation, as it helps students to understand the text, resulting in better criticality.

Furthermore, some international students come from cultures in which teachers are granted great respect and critiquing them is perceived as 'impertinent' (Evans & Stevenson, 2010, p.245), suggesting that students have not been involved in the process of discussing the work of others or questioning others' ideas, whether the others are teachers or authors. This fits very well with what Johnston et al. (2011) posited about the way in which different cultures value criticality in different ways. Li and Wegerif (2014) substantiated this notion when they argued that students from Confucian cultures are not coming from a culture that emphasises rote memorisation at the expense of promoting thinking; rather, they are familiar with memorisation and inner reflection. At the same time, there are those who would argue that critical thinking is not merely a mental process, but also a task that needs to be achieved (Bailin, Case, Coombs and Daniels (1999). Bailin et.al. (1999) also gave examples of the aims of critical thinking: answering questions or making decisions, etc.

Students' background knowledge also affects their critical thinking, as well as their familiarity with 'standards of good thinking' (Bailin et al., 1999,

p.292). This does not mean that international students are unable to think critically; it is rather that they may not have been trained to do so. In addition, lack of background knowledge can exacerbate the academic experience and make criticality even more difficult, in that the degree to which a student is able to think critically about a given topic is largely affected by what he/she knows about it (Bailin et al., 1999; Johnston et al., 2011). In effect, the more students get acquainted with their disciplinary knowledge, the better they become regarding their criticality and this is clearly shown in Dan's second think aloud report through his comments on statistics.

Another characteristic of criticality that contributes to textual understanding is an intellectual resource suggested in the model of Bailin et al. (1999) known as 'operational knowledge of standards of good thinking'; from this come the standards of judging intellectual products and the principles that guide certain practice. This operational knowledge is also said to relate to the procedural knowledge that students must be aware of (Johnston et al. 2011). Therefore, in addition to understanding what the text conveys, criticality requires further levels of analysis, linking ideas and comparison. This may help to explain why some participants of the first phase were able to conceptualise what criticality means; however, they found it difficult to apply. With regard to the item '*criticality is difficult as it requires a deeper level of analysis, linking ideas and comparisons*', 83.1% of participants agreed, indicating that this is the source of difficulty when criticality is considered.

Participants of the first phase showed a number of changes that proved that they were starting to engage critically with texts. For instance, Sandy mentioned the examination of the structure of the text; critical reading of a text is partly determined by a reader's ability to examine its structure, which results

in a better understanding of the way in which an author develops his/her argument (Poulson & Wallace, 2004). Sandy also demonstrated another important skill in engaging with a text critically, namely considering the purpose of the text. The author's purpose of writing must be considered if we are to read a text critically (Poulson & Wallace, 2004).

Being involved in the analysis of academic critical practices could help students determine the standards of good thinking, as suggested by Bailin et al., (1999). This is precisely what Dan described when he reflected on critiquing a paper at the beginning of the academic year, as he paid attention to his friends' answers when they responded to the task.

Regarding the academic skill of being critical, the present study highlighted that international ESL students at postgraduate level may arrive at international universities without being fully aware of the academic norms and practices. This means that, as with other difficulties, their readiness to pursue their studies in international universities is questionable. However, this study also reveals that over time some students either showed or reported an improved level of criticality as a result of being immersed in an academic atmosphere. Some students are able to acquire the skill of reading critically. The present study not only reveals that criticality is a challenge for ESL international students but goes further in tracking the changes in students' academic experience, revealing how they acquire such a skill through interaction with others in the academic environment.

5.5.4. Inability to draw the required inferences that feed into construction of mental model.

A demonstration of students' inability to draw the required inferences that feed into the construction of a mental model was apparent in some of the first

think aloud sessions and interviews, when students were able to read all the words in a sentence but could not get the message that the author was trying to convey. In addition, without the ability to infer the connection between different ideas in the text, the global coherence inferences cannot be formed, making it impossible to establish a mental model. These findings are validated by the web survey, as more than half of the students, accounting for 68.8%, agreed that they sometimes knew the meanings of the words but were unable to construct a meaning of what the author is trying to say. These results are in agreement with what was found by Manarin et al. (2015) with students who speak English as L1 and were at post-secondary level in Canada. They reported a similar problem as they understood the words in order but they did not seem to grasp what was in the text. As the data suggest, in addition to vocabulary knowledge that would affect inference-making considerably, lack of background knowledge is also significant. When students cannot make the global coherence inferences, due to lack of background knowledge, this results in difficulty in comprehension. The strategy suggested by one student was to use Google to find the connection between different parts of the text; in the second stage, 45.5% of students agreed that they use this strategy and this percentage was higher than that of those who disagreed, indicating the application of such a strategy in a wider international postgraduate student community at the same University. A perception was apparent among students that English academic style is difficult, and this difficulty is attributed to their being unfamiliar with it. 40.3 % of survey takers agreed with the item '*I find the English academic style difficult because it is different from the academic style I am familiar with*', and this was higher than those who disagreed, suggesting the existence of such a perception among the larger group of international postgraduate students.

Another source of difficulty that results in the students being unable to draw the relevant inferences and establish the mental model is the length of sentences. As the first phase data suggest, with long sentences, students cannot hold the upcoming details in the working memory, making them unable to connect the new information with what they know. Ultimately, a difficulty in comprehension occurs as the relevant inferences from the texts have not been made. In the second stage, 36 respondents, accounting for 46.8%, agreed that they find it difficult to read long sentences. Different strategies were suggested by students to negotiate this difficulty. First, they reported the use of a strategy to analyse long sentences to establish the subject and the verb; slightly less than two-thirds of the web survey respondents, accounting for 59.7%, agreed that they would use this strategy to tackle the difficulty of long sentences. Skipping numbers and names and focusing on words was the second strategy suggested by students and it seems that about two thirds of survey takers agreed that they use this. Third, highlighting the important details and rereading them to make sense of the sentence was also mentioned by students, and more than two-thirds of students, 64.9%, agreed that they would use this strategy to comprehend long sentences.

Indeed, it has been established in the literature that students' ability to make inferences is affected by different factors. In agreement with what Oakhill et al. (2014) indicated, and as the data suggested, these factors include memory and students' access to vocabulary and background knowledge. Students' ability to draw inferences as affected by these factors is an important aspect of their comprehension and, indeed, it is strongly linked to comprehension, as it was found that inference-making correlated with reading comprehension (Daugaard, Cain & Elbro, 2017). In another study, it was a

predictor of reading comprehension (Oakhill & Cain, 2012), in that difficulty in making inferences resulted in poor comprehension (Cain & Oakhill, 1999). Moreover, in the study conducted by Van den Broek, White, Kendeou, & Carlson (2009) struggling readers found that constructing a mental model was effortful, and invalidity characterised the inferences they made. Nevertheless, it needs to be highlighted that these studies converge with the present study findings, but their evidence is from an L1 setting, and, except for the study by Manarin et al. (2015), they were all conducted with children at varying ages. So, the present study provides evidence that the difficulty of being unable to draw inferences from the reading texts can also be encountered by ESL students at the postgraduate level.

5.5.5. Inability to concentrate due to distractions.

Students' inability to sustain attention and concentrate on their reading was another difficulty reported by some of the first-phase participants. Sam mentioned being distracted by the multitude of tasks he had to do while Amy specifically linked this difficulty to the phone. It seems that this is experienced by a larger group of ESL students, as more than half of web survey respondents agreed with the item, accounting for 62.4 % of respondents, indicating that distractors like their phones were posing a problem. This finding is congruent with what has been found in other studies, e.g., Jacobsen and Forste (2011), who web-surveyed 1026 first-year students at an American university, including a number of international students, and found that 62% of participants indicated that they multitask when they study, whether in class or while doing their homework, and this multitasking involved non-academic media and this media use was perceived as a distractor. Similarly, Junco and Cotton (2012) surveyed a large number of approximately 1,649 university students,

who reported spending a considerable amount of time using information and telecommunication technologies. Moreover, they also reported that they were engaged in different activities online while doing their school work. This illustrates how some students from different universities and across various levels of study are distracted by their cell phones while doing their academic work. This finding is consistent with the findings of another study conducted by Rosen, Carrier and Cheever (2013); according to their findings, from a sample of 263 students from different levels of study including university students, participants—even after being observed for only 15 minutes—could not remain focused and on task for more than about six minutes. Except for walking and stretching, most of the distractors they responded to were technological.

In the present age of technology and because of the accessibility to the arsenal of online activities cell phones can offer their users, it can be concluded without argument that it poses a challenge to the students to remain focused while doing their academic work, particularly if the negative consequences of this addiction to cell phones affect academic achievement. Lepp, Barkley and Karpinski (2014) surveyed 490 undergraduate students at an American university and concluded that there was a negative correlation between participants' cell phone use and their grade point average. A similar negative relationship was also found by Jacobsen and Forste (2011) between students' grades in the first semester and their electronic media use. Junco and Cotton (2013) also found a negative association between the use of Facebook, texting and students' GPA.

To conclude, ESL students find it difficult to manage their study time, a difficulty that is caused by lack of study skills. This particularly confirms the multidimensionality of ESL students' readiness.

5.5.6. Translanguaging when reading.

ESL students in the present study seem to concurrently use the two languages, English and their L1, to make sense of the reading texts. They also seemed unhappy about such a practice and perceived it negatively to be a time-consuming one. However, it is suggested in the literature that translanguaging is an encouraged and welcomed practice, as language learners utilise their L1 repertoire to make meaning (Garcia & Li Wei, 2014). In so doing, translanguaging helps increase students' 'linguistic resources in the process of problem solving and knowledge construction' (Li Wei, 2017, p.7), and this contributes to the enhancement of students' experience by the empowerment it offers them and the development of their bilingual identity (Li Wei, 2017). Moreover, it allows students to be critical and creative users of language, as it not only entails moving between languages but also involves pushing boundaries between them (Garcia & Li Wei, 2014; Li Wei, 2011). With all of these potential gains of translanguaging, it is surprising that the present study participants perceive it as an obstacle. In another study, Creese and Blackledge (2010) discerned that moving between languages does not associate with positive feelings in educational settings and proposed that, to ease the feeling of guilt among students when they use translanguaging, more understanding through research is needed to know pedagogic bilingual practices and how students accept and legitimate them. They also advocated the notion that taking this stance of viewing translanguaging as a negative practice may have come as a result of previous academic experience, where certain pedagogic practices are emphasised (Creese and Blackledge, 2010). For instance, in some English teaching classes, students are confined to using only English and are not encouraged to use their L1.

Another important issue raised by participants of this study is that later in the academic year they reported that translanguaging had either stopped or decreased. This was also verified by the survey respondents, as 48.1% of them disagreed with the translanguaging item in the survey, and they outnumbered those who agreed, suggesting that the more students were engaged in reading in English, the less they utilised translanguaging. It can be concluded that students started their academic study with lower linguistic proficiency; thus, practising translanguaging was more common; later in the academic year translanguaging decreased after their linguistic proficiency had improved. This interpretation is strengthened by the suggestion of Garcia and Li Wei (2014, p. 77) that translanguaging could mostly be found in the education of students 'at the beginning of their bilingual continuum'.

Translanguaging as a linguistic practice has been investigated at the undergraduate level, as in the work of Li Wei (2011) and the study of Li Wei and Zhu (2013). In both of these studies, the multilingual practices of a group of Chinese university students were investigated in everyday life. This makes the present study different from these studies as it reveals that translanguaging is one of the practices that ESL students at postgraduate level use when they read for academic purposes. They perceive it as a challenge and, as the present study traces the changes over time in students' perceptions about academic reading difficulties, it also reveals that, over time, ESL students are able to overcome this challenge. Translanguaging has not received much attention in an academic context, and this suggests the need to carry out further investigation in an academic context to check whether it maximizes students' opportunities for using their first language repertoire at the postgraduate level.

5.6. ESL students' awareness of their shortcomings and their ways of adaptation to the new academic culture

In order to help them overcome academic reading challenges, ESL students utilize a number of resources. Some of these resources are directly linked to English language proficiency and these have already been discussed in the English language proficiency section. In addition to the linguistic support that students mention, they identify other resources they have already used, including the help and support they receive from other international students and how this cooperation helps them overcome reading difficulties. Survey data supported the finding that other ESL students were helpful, as 41.6% of participants agreed with that item, outnumbering those who disagreed and indicating that cooperation between some ESL international students was found helpful in overcoming their shared difficulties. However, the percentage of survey respondents who disagreed with the item *'My friends who have the same first language are helping me to overcome my reading difficulties'*, was 37.7%, higher than that of those who agreed, indicating that cooperation between ESL international students does not necessarily come from other students who have the same first language but is available from other international students. Another resource of support was mentioned by a student who shared a Facebook group with her classmates for discussion. However, when this was investigated in the web survey - whether students make use of Facebook discussion group - the results did not agree with the data of the first phase, as 46.8% of respondents disagreed with the item.

The use of a multitude of resources to overcome academic reading difficulties is an indication of the ESL students' awareness of their shortcomings that could be the result of lacking skills. In compensation for these

shortcomings, they demonstrate how they adapt to the new academic culture; they try to find possible resources, whether by joining linguistic support classes or by working with other ESL students.

All in all, when ESL students arrive at international universities, they cannot be described as university-ready to pursue their studies at the postgraduate level due to gaps in their knowledge or skills. The difficulties they encounter stem not only from a lack of English language proficiency, but also a lack of other skills. However, some students are able to cope and change over time.

In the second phase of the study, IELTS was found to be a valid moderate predictor of ESL students' academic experience. This finding validates what was previously argued, namely that students' difficulties do not have solely linguistic origins but that ESL students also face other difficulties, such as a lack of academic skills. Addressing the gap in students' knowledge and skills may enable them to operate comfortably at university.

Chapter 6. Conclusion

In this section, I will give a summary of the present study with the key findings of the two phases. I will also discuss how this study has contributed to existing knowledge about academic reading for ESL students. In addition, a brief discussion about the implications of the study findings in ESL contexts along with limitations of the study will be presented. Suggestions for further research are also discussed.

6.1. Summary of the Study

The aim of the first phase of this study was to understand the academic reading practices of ESL students pursuing their postgraduate studies in one of the UK universities. The study also provides insights into the students' perceptions of academic reading difficulties encountered by them along with the strategies they adopted to overcome these difficulties. In this phase, the data were collected in two separate rounds using think aloud protocol and semi-structured interview. This longitudinal approach allowed me to trace the changes in students' perceptions of academic reading practices, their difficulties and how they overcome them. In this first phase, nine ESL students pursuing postgraduate studies (except one who was an exchange programme student) participated. They were in the first year of their academic programme, enrolled in different disciplines at the university. The results of this phase provide a clearer picture of what academic reading means to ESL postgraduate students. A key finding that emerged from the first phase is that ESL postgraduate students encounter a wide array of difficulties. These difficulties do not stem solely from lack of English language proficiency but some result from a lack of academic skills. This makes the academic reading experience to be difficult to

ESL students as they arrived at the start of their studies insufficiently prepared as to how to approach academic texts. However, they showed changes over time not only with regard to academic reading practices but also with some difficulties being alleviated. The main lesson that has been learnt is that they started their studies in a UK university with their readiness being questionable but overtime they were capable of showing that they have learnt through different forms of interactions in academia.

The study adopted an exploratory sequential mixed method design. This means that the results of the first phase were used to develop a scale of the perceived level of academic reading difficulties in a web survey to collect data for the second phase. In that phase, the focus shifted to seek generalisation of the first phase findings with regard to academic reading. Furthermore, the second phase investigated the importance of English language proficiency in relation to students' perceptions of academic reading difficulties. Seventy-seven ESL postgraduate students in the first year of their academic programme responded to the web survey. The results of the second phase provide support for the first phase findings in the sense that they suggest that IELTS is a moderate predictor of students' perceptions of academic reading difficulties. In addition to the linguistic ability of the students there are many other factors that come into play to affect students' academic reading experience; for instance, lacking certain academic skills is an equally important factor that affects students' reading experience.

Overall, the findings of the two phases suggest that ESL students' readiness to join a UK university is questionable. Nonetheless, the findings also show that they improve overtime and are able to cope with academic

reading difficulties, as revealed through the changes they either reported or demonstrated that could be considered their ways of adapting to academia.

Sociocultural theory is used to explain the changes over time that students report in their academic reading practices and difficulties. In this way, reading in the present study is viewed as a social practice because students improved through their participation in the academic activities.

6.2. Contribution to Knowledge

In the first phase of the present study, a longitudinal approach was adopted to collect data by the use of two methods: think aloud protocol and semi-structured interview. The use of these methods in collecting data in two rounds enabled me to explore in depth academic reading practices and difficulties. Moreover, it made it possible for me to trace the changes over time in students' academic reading practices and difficulties.

The present study has extended our knowledge about the academic reading practices of ESL postgraduate students. It has done this in many ways. First, it has provided evidence that ESL postgraduate students' academic reading practices are not dissimilar to those of students at undergraduate level, whether in ESL contexts or not, and it thereby contributes to the already available discourse that questioned students' readiness to enter university regardless of the level. This suggests that there is a gap between the skills that students have when they start their academic programme and the skills they need to perform in academia. Second, two emergent findings add to our knowledge about ESL students' academic reading practices: the first relates to the increase in frequency of reading over time and the increase in the number of pages that ESL students read; the second concerns diversifying the purposes of reading, as the ESL students over time started to read academic

materials not merely for assignments, as the first round revealed; in the second round of interviews, the students claimed that, in addition to reading for their assignments, they started to read as preparing to apply for a PhD. It seems that, over time, they started to value the importance of academic reading and started to read more frequently, read more pages and read not merely to do their assignments but also for other purposes. These two findings have added to our knowledge as they substantiate Rogoff's (2003) approach in which human development is perceived as a result of participation in cultural activities. Changes that students reported over time came as a result of them being participants in academia, whether by receiving direct assistance from supervisors, class mates, and other international students or by receiving indirect messages through interacting with others in academia.

In relation to ESL students' perceptions about their English language proficiency, the present study has extended the boundaries of our knowledge. As much research has been dedicated to investigating undergraduate student groups, this study provides evidence from a postgraduate community of ESL students that they adopted a sceptical perception about their English language proficiency. The study also revealed that some students remained sceptical about their English language proficiency even when their score in IELTS was higher than their academic programmes required. This means that some ESL students come to academia insufficiently linguistically prepared regardless of their IELTS score; it therefore casts doubt on the adequacy of EAP courses that students take before they enrol in academia. Furthermore, it draws attention to the inefficiency of IELTS preparation courses in improving students' linguistic proficiency.

The study also indicated how the English language proficiency of postgraduate ESL students changed over time, and, more specifically, in what ways academic reading helped ESL students improve their English language proficiency in three dimensions: it provided a rich input that increased their lexical resources, it enhanced their writing as it inspired them to generate ideas for their assignments through the knowledge they acquired, and the academic texts with the rhetorical organisations they present inspired students to mimic them in their writing. Improvements in these three dimensions are attributed to academic reading. This is significant because the present study works as an instantiation of Murray's model (2010a, 2010b, 2013), in which he argued that English language proficiency is only one of three competencies that international students need. Even if their English language proficiency changes overtime, it is not sufficient to help them operate at the university successfully.

Regarding the academic reading difficulties that ESL students encounter while they read, the present study contributes to the discourse that questioned ESL students' readiness to pursue their studies in universities by adding to the existing knowledge about these difficulties, whether they result from a lack of English language proficiency or lack of other skills. It illuminates the disconnect between the skills that ESL students have and the skills they need to perform their academic work. These additions are outlined below.

Many of the studies that have investigated academic reading difficulties show that lack of background knowledge is one of these difficulties. Nonetheless, the present study has extended our knowledge through indicating what causes such a difficulty, namely, when texts introduce complex content or culturally specific detail, or when students change their major to a totally different one, and when the texts introduce statistical detail with which students

are not familiar. Most importantly, the present study revealed that although the ESL students arrived at university insufficiently prepared with background knowledge, they changed over time. Simply put, the more they read, the more they became familiar with topics and issues.

In relation to criticality, like other studies the present study indicated that criticality posed a challenge for ESL students and that some of them showed a change over time, as was apparent in the second sessions of think aloud protocol. However, the present study goes further to reveal what particularly helped students to change, namely being involved in the analysis of academic critical practices.

The present study also threw light on the students' inability to draw inferences. While much research that produced similar results has been conducted in L1 contexts, this study provides evidence that students' inability to draw inferences is also a difficulty for ESL students at postgraduate level.

Much research has discussed translanguageing with second language users in non-academic contexts. The present study provides evidence that this is one of the practices that ESL students at postgraduate level use when they read for academic purposes. The study also indicated that the students perceived it as a difficulty in reading and it decreased over time as their English proficiency improved.

Along with the academic reading difficulties that this study highlighted, it also presented ESL students' ways of adapting to the new academic environment by making the most of some available resources, such as seeking help from their supervisors or other international students.

The investigation of the association between English language proficiency and the perceived level of academic reading difficulties of this study

added to the whole picture about the international students' experiences with academic reading. As the correlation between students' scores in IELTS and the total perceived level of difficulty was moderate and negative correlation. This confirms what has been found so far in relation to academic reading difficulties: that not all difficulties stem from lack of English language proficiency but that some difficulties result from a lack of other academic skills. This result supports Murray's model (2010a, 2010b, 2013), according to which English language proficiency, as measured by IELTS, is only one need that must be accompanied by other skills to enable ESL students to operate successfully at university.

Finally, the study conveys an important message about ESL students' readiness to pursue their studies in international universities and the extent to which their readiness is perceived solely in terms of their English language proficiency, whereas there are other important skills that contribute to preparing ESL students for their studies in international universities.

6.3. Implications

The findings of the present study are insightful for different stakeholders: they suggest that the current practices and difficulties of academic reading should be reconsidered by ESL students themselves in the first place, by university professors and lecturers who teach or supervise ESL students in their academic programmes, and by English language tutors. Furthermore, in a wider context, the findings are insightful for policy makers such as admission officers in universities and EAP programme syllabus designers.

First, in the light of the present study's findings relating to the academic reading practices of ESL students and the range of difficulties they encounter while they read, ESL students who are planning to pursue their studies in the

UK might find these insightful in the sense that they rethink the skills they are equipped with. The dimensions of their readiness can help them identify their points of strength and weakness. Upon identification of these points, they can act accordingly to maximise their points of strength and address points of weakness by seeking the suitable help. The present study warns ESL students that it is not sufficient to be linguistically prepared because other academic skills are also important and they need to be equipped with these skills. It also delivers a message to ESL students that IELTS preparation courses are not enough. It is frequently the case that ESL students receive training to take the IELTS examination without paying further attention to EAP courses, as mentioned by Sandy, who describes how, in IELTS preparation courses, ESL students practise how to increase their IELTS scores through the use of certain strategies even though this does not necessarily contribute towards improvement of their skills.

The study also emphasizes the importance of participation in academic activities and cooperation among all members of academia. This is of special importance to ESL students in that it allows them to understand the dynamics, norms and values of the new academic culture with which they might not be familiar.

In addition to the usefulness of this study to ESL students because it exemplifies the importance of academic reading and other specific skills that are important to acquire before joining academic programmes, it gives an account of the possible difficulties they may encounter and raises students' awareness about ways of overcoming them.

The findings are also of significance to university professors and lecturers who teach or supervise ESL students. Raising their awareness about

reading practices and the problems of academic study for non-native speakers can help staff estimate how difficult the experience is for ESL students. Subsequently, this understanding can help them gear their support and adjust their methods of teaching towards their students' needs. For instance, being aware of ESL students' needs allows university professors and lecturers to guide students to the right place where they can get support. In addition, being aware of students' needs to participate in various academic activities in order to develop would help professors recognise the importance of creating opportunities for participation and encouraging students to participate. The findings of the present study might also inspire university professors and lecturers to design course requirements that maximize cooperation among students, whether in virtual platforms or classes, to allow them to develop.

The study findings are also relevant to English language tutors who provide pre-sessional or in-sessional language support for ESL students. Understanding ESL students' practices and difficulties in reading would help them tailor their support towards those areas that students find problematic.

Policy makers and admission officers who decide on the required IELTS score for different disciplines are also likely to find the present study findings beneficial. Recognising the main finding, which states that English language proficiency is not the only issue for ESL students, helps draw their attention to two points: first, the extent to which the current linguistic measures that the university uses to assess students' eligibility to get accepted for a postgraduate programme are limited. In effect, increasing the required English language score in IELTS might not be the answer as this does not necessarily result in all the students' difficulties being eased. Second, while applying other measures to screen ESL students' eligibility to join the university remains unworkable, early

diagnosis of students' needs to be equipped with specific academic skills is an important responsibility of policy makers at the university. They are the ones who can set other requirements for specific programmes to ensure that students are prepared with the necessary skills to pursue their postgraduate studies successfully.

Designers of EAP courses may also find the present study findings informative in that they indicate the extent to which the academic reading skill is not always given weight equal to its importance. Thus, the EAP course designers, whether they design a course to be delivered at the English language institute at the university or in any other independent institution, could consider assigning greater importance to the reading skill.

6.4. Recommendations

In the light of the findings, a number of recommendations can be made. They are divided into two parts, starting with recommendations in the wider context of EAP followed by more specific recommendations for policy makers, admission officers and decision takers in universities.

6.4.1. General recommendations in the wider context of EAP.

- As academic reading is the main source through which students acquire academic knowledge, it should be given more emphasis in EAP courses by assigning more time to it in order to familiarize students with various academic demands.
- EAP courses, in particular the reading module, should introduce students to the concept of criticality. Students need to practise how to develop this skill and this can be achieved by introducing texts and setting tasks that resemble those they are to tackle at the university.

- The teaching practices of English as a second language should promote the use of both the first and second languages to process the meaning of texts that students read, if this makes it easier for them. Encouraging this practice might help students perceive translanguaging as a strategy rather than a difficulty.

6.4.2. Recommendations for policy makers, admission officers and decision takers in universities.

- While using other measures to assess students' eligibility to pursue their studies by testing students' key content knowledge is not possible before offering them admission, students who lack adequate disciplinary knowledge because they change their major need help and, stemming from the idea that academic reading is the source of academic knowledge and given that students largely depend on a suggested reading list, two sources of help could be offered to postgraduate students. First, in postgraduate taught programmes the lecturers' reading lists can be carefully selected to include graded readers or references labelled as basic, intermediate and advanced levels to help students start reading from the level at which they feel comfortable and then move subsequently at their own pace. Alternatively, help can be in the form suggested by one participant: the department where he studies provides an online graded course starting from beginners and moving to an advanced level. Specific courses that introduce key knowledge in the major can be set as a requirement for those students who change to a different major, in order to fill the gap in their background knowledge.
- Criticality is a vague concept with which students are not well enough acquainted. Therefore, if international students are to join universities in

which criticality is perceived as an important academic skill, then unarguably, students' unfamiliarity with this skill is a problem that needs to be addressed. In other words, neither implicit learning, in which students are able to acquire academic skills through interaction with academics and other students, nor in-session courses that deal with students from different disciplines as a homogenous group, should be considered sufficient to meet this need for all students. Since criticality is perceived differently in different fields (Johnston et al., 2011), this is in line with what Murray (2010b) suggested: rather than study skills sessions with students from different disciplines to improve their academic literacy skills, students need to have training within their disciplinary domains. Because of variations between disciplines, EAP courses can introduce reading academic texts from their disciplines to maximise students' familiarity with the disposition of criticality in their respective disciplines.

- Language support that the university offers to ESL students should be publicised widely so that students are aware of all affordances available to them.
- ESL students should not be dealt with as if they are homogenous group: they are different in various aspects; they also plan to join or have already joined different disciplines. In the reading module of EAP courses students can be introduced to discipline-specific texts from an early stage to allow them to become familiar with the genre.
- Students' inability to concentrate due to distractors means that overuse of cell phones is not just a habit students are not happy with. In effect, this can also have serious consequences. In the literature it has been

indicated that overuse of cell phones negatively correlates with students' academic performance (Lepp et al., 2014; Jacobsen & Forste, 2011; Junco & Cotton, 2013). In such cases, raising students' awareness would be of paramount significance. This can be achieved by introducing students to certain strategies to create a compromise between their academic work and the use of cell phones.

- Opportunities for communication among international students both on campus and at a distance can be maximised by providing them with virtual platforms. Finding and encouraging international students' groups can also maximise cooperation among international students that might facilitate receiving additional support for them.
- To a certain extent, ESL students' difficulty of lack of vocabulary knowledge seems to be insurmountable. It reflects the inadequacy of EAP generic courses to equip students with the vocabulary they need to operate successfully at university. Evans and Morrison (2010, p.392) questioned the so called 'one size fits all' approach of teaching vocabulary in EAP. This argument was also extended by Durrant (2014) as students from various disciplines were found to diverge in the use of written vocabulary. Therefore, it can be concluded that each discipline should have its vocabulary list.

Keeping this in mind, it is recommended that EAP courses should respond to this need of ESL students, as this difficulty is, fortunately, preventable. This can be achieved by introducing an academic vocabulary list for students in the EAP courses and in the intensive language programmes that precede the students' study, as this might help students in this regard, given that all participants in the first-phase of this study, except for one,

revealed that they have not used the academic vocabulary list, including those who joined the pre-sessional course. These lists should be discipline-oriented. To do this, ESL students' attention can be drawn to the most recent academic vocabulary list prepared by Gardner and Davies (2013), which is freely accessible through the interface www.academicwords.info. The list contains about 3000 words along with useful data given about each word, for example, top collocates and concordance lines (Gardner & Davies, 2013). Although there are those who doubt the efficiency of the use of this list by students in language courses due to its length (Webb & Nation, 2017), I believe it could work as a useful resource for students because of the data it provides for each word. To help ESL students tackle the difficulty of lack of technical vocabulary knowledge, introducing a glossary of technical words can help maximise students' familiarity with the technical terms in their disciplines. They can also be guided to use the technical word lists that have been created for their respective disciplines.

6.5. Limitations of the Study and Suggestions for Further Research

Like any other research, this study was subject to a number of limitations. In this section, I will discuss these limitations and, based on these limitations, make a number of suggestions for further research. It is worth noting that these limitations are relevant to the study as a whole. The limitations that are relevant to the study methods are discussed earlier in the methodology chapter.

In relation to the study sample, three limitations existed. First, with regard to the first phase sample, only campus students were recruited, and no distance learning students were included. Given that different forms of interactions could lead to improvement in reading skill and such interactions were available only to campus students, distance learning students might have a different story to tell about academic reading practices and difficulties which the present study failed to investigate. Therefore, it would be worth investigating the academic reading experiences of distance learning students. Second, the first phase participants were all Masters students except one, who was a student in an exchange programme. Thus, the study, in its first phase, was limited to participants from postgraduate taught programmes. It was difficult to recruit participants from other cohorts, e.g. research students, as participants needed to be in their first year of study in their academic programme, and usually research students undertake an academic programme for a year before they join the research programme; this therefore made it difficult to recruit a research student in his/her first year. For further research, it would be interesting to find out if research students do have the same practices and difficulties of academic reading. Third, the study in both phases worked solely with ESL students as participants and the academic reading difficulties therefore have been investigated from one angle, which is the students'; the voices of the university staff, lecturers or English language teachers in the institute were not investigated. I believe that their perceptions might enhance our understanding of the academic reading difficulties of international students and further research considering the faculties' and English language teachers' perceptions would be revealing.

With regard to the second phase of the research and stemming from the main purpose of conducting this study, it focuses on understanding the ESL students' perceptions about academic reading and the difficulties they face. Therefore, the study, in its section covering the association between English language proficiency and students' perceptions of academic reading difficulties, overlooked the actual performance of students at the university as measured in their module scores. Instead, the IELTS scores were correlated to the total perceived level of difficulty. It would be insightful to look at the actual performance of students in modules in relation to the perceived level of academic reading difficulties.

One key finding of the study is that ESL students at postgraduate level translanguage while they read for academic purposes. Although it has been suggested in the literature that translanguaging has potential gains for students (Li Wei, 2017; Garcia & Li Wei, 2014; Li Wei 2011), it is perceived by students as a challenging and time-consuming practice. It has been suggested that this is the result of previous academic experience in which students are restricted to using only the target language, i.e. English, in the classroom (Creese & Blackledge, 2010). The present study extends our knowledge about translanguaging in terms of its existence in the practices of ESL postgraduate students; it also provides evidence that it decreases over time. However, it fails to investigate why such a practice is not welcomed by ESL students and it would be insightful to further investigate this issue to understand what causes students' resistance.

Finally, the results of this study are confined to the academic year 2016/2017 and to international postgraduate students in the first year of their academic programme at one university. Therefore, the generalizability of these

results is not possible. However, transferability can be considered, as there are many similarities between the findings of this study and those of other studies in different contexts.

6.6. Putting it All Together

From the findings of the present study one main lesson can be learnt: it is to emphasize that ESL students face many challenges when they join international universities to pursue their studies at postgraduate level. At the same time, it challenges the strongly held view about the needs of ESL students that they solely have to have a good command of the English language and that this will enable them to operate successfully in academia. It challenges this view through the accounts it gives us about the difficulties that do not stem from lack of English language proficiency, but rather result from a lack of other academic skills. This is not to undermine the impact that English language proficiency has on students' experience in academia; it is rather a call to give the other academic skills equal attention to that given to language proficiency.

6.7. Conclusion

I started this chapter by giving a brief summary of the study along with the key findings of the two phases. I then underlined the ways in which this study has added to our knowledge about ESL students' perceptions about the academic reading difficulties and the importance of English language proficiency. In the following section I identified how the study findings might be beneficial to different stakeholders, after which I made a number of specific recommendations to EAP practitioners, policy makers, admission officers and decision takers in universities. I also gave a detailed account of how the findings of this study are limited and I made suggestions for further research based on

these limitations. Finally, I offered my final thoughts about the present study findings.

Appendices

Appendix 1: Texts used in the Think aloud reports

| Major of participants | Title of the article/book chapter | Authors | Journal/ book title, year of publication |
|---|--|--|---|
| Master in Technology, Creativity and Thinking | Creating spaces in the primary curriculum: ICT in creative subjects | AVRIL LOVELESS | The Curriculum Journal, 2003 |
| | ICT and pupil assessment | R. McCormick | The Curriculum Journal, 2004 |
| Master in Middle East and Islamic Studies | Arabic religious poetry | Th.Homerin | Arabic literature in the post classical period, Edited by Roger Allen and D.S. Richards, 2008 |
| | The Maqama | D. Stewart | Arabic literature in the post classical period, Edited by Roger Allen and D.S. Richard, 2008 |
| Master in Social and Organisational Psychology | Attitudes towards Older Australian workers | E. Helmes | Australian Journal of Organisational Psychology, 2015 |
| | Caring for the cares: Fatigue, sleep and mental health in Australian paramedic shift workers | J. A.Courtney A. J.P.Francis S. J.Paxton | Australian Journal of Organisational Psychology, 2010 |
| Master in Education (TESOL) | The effects of timing of corrective feedback on acquisition of a new linguistic structure | S. Li R. Ellis Y. Zhu | The modern language journal, 2016 |
| | Cognitive and sociocultural perspectives: Two Parallel SLA worlds? | J. Zuengler E. R.Miller | Tesol Quarterly, 2006 |
| Politics and International Relations of the Middle East | The Arab spring comes to Syria | C. Philips | The Battle for Syria, 2016 |

| | | | |
|---|--|--|---|
| Politics and International Relations of the Middle East | The Israel-Palestine conflict | Richard Youngs | Europe in the new Middle East: Opportunity or Exclusion |
| Master in Education (Special Educational Needs) | From Concepts to practice in deaf education: a united kingdom perspective on inclusion | S. Powers | Journal of Deaf Studies and Deaf Education/2002 |
| | Exploring elementary students' perceptions of disabilities using children's literature | J. Wilkins, K.Howe, M.Seiloff, S.Rowan, & E.Lilly. | British Journal of Special Education, 2016 |

Appendix 2: Interview Schedule (The First Draft)

Participant's Number:

| Demographic information: | English language proficiency and usage | Academic reading difficulties | Compensatory strategies |
|---|--|--|--|
| Gender: First language: How long you have been here in the UK? Length of enrolment in the current academic program: Level of study: Master/ Edd, Phd. Subject area: Ielts score: Reading score in IELTS: | **When you started this course did you think your English was at a high enough level for studying in the UK? **How do you decide on what to read on your degree course? **What do you think academic reading is? I mean when you decide to read something can you describe how you read it? **Do you read for different purposes on your degree course? If yes what are the purposes? ** What kind of sources do you usually read from? Journal articles, books, websites etc. | **Are you keeping up with reading load? If not what are the problems? **What do you think is the biggest problem for someone learning to read in a second language for academic purposes? | **What is a piece of advice you would give someone learning to read in a second language for academic purposes? **What do you do when you come to a section you have a hard time with when you are reading? **What other factors have helped to make you able to cope with difficulties? **Have you ever received an academic English language support at the university? If yes what do you think about it, how useful have they been? If no what kind of language support you would like to receive? **What do you think a successful reader is at university? |

Appendix 3: The First Round Interview Schedule

Pre-TAP interview Schedule:

♣ Demographic information:

1. Gender:
2. First language:
3. How long you have been here in the UK?
4. Length of enrolment in current academic programme:
5. Level of study: Master's/ EdD/ PhD.
6. Subject area:
7. When was the last IELTS test?
8. IELTS score:
9. Reading score in IELTS:

♣ English Language proficiency and usage:

1. How frequently do you read for academic purposes?
2. Roughly, how many pages do you usually read a week for academic purposes?
3. What specific process do you follow when you read for academic purposes?
4. How do you decide on what to read for your degree course?
5. During the last week, can you remember what you have read for academic purposes?
6. Can you give specific purposes that you were reading them for?
7. What sources do you usually read from? For example, journal articles, books, websites.
8. What source do you prefer and why?
9. Does academic reading improve your vocabulary knowledge? If yes, can you explain how?
10. Does academic reading improve your reading speed? If yes, can you explain how?
11. Does academic reading improve your writing ability? If yes, can you explain how?
12. When you started this course did you think that your English was at a high enough level for studying in the UK?

Post-TAP Interview Schedule:

♣ Academic reading difficulties:

1. Do you think that the unknown vocabulary in academic texts impinges upon your understanding of the content?
2. What do you usually do when you read a specific text with unknown vocabulary?
3. Have you ever tried to find an academic word list to learn technical vocabulary before you started your programme?
4. Have you tried to use a dictionary to translate unknown words as you read them?
5. Have you found yourself unable to comprehend a specific text because of lack of background knowledge?
6. Can you identify whether it was because of unfamiliarity of the content (the content is of a complex level) or unfamiliarity of culture?
7. What do you usually do when you read a specific text with which you are unfamiliar?
8. With topics you are unfamiliar with, because of the complexity of the content, have you ever tried to read some easier texts that introduce the basics?
9. Have you considered re-reading the required reading after the lecture, as lecturers usually introduce some explanation for complex content?
10. Have you tried to find some texts that introduce the same content in your first language?
11. What problems do you encounter when you read in a second language for academic purposes?
12. Are you keeping up with the reading load?
13. If not, what factors have prevented you from finishing reading in a reasonable time?
14. Some students report that they read slowly because they make a shift in thinking between their first language and English. How about you?
15. What do you usually do when you have a massive amount of required reading, and only have a limited amount of time to do it in?

16. Do you think that academic reading is challenging because of the differences in structures between your first language and English? In other words, do you think your reading in English is influenced by the characteristics of your first language?
17. Do you think that academic reading is challenging because it requires a higher level of skill, for example, criticality and evaluation, rather than merely understanding what the text conveys?
18. Do you think that, above all, you are able to cope with academic reading difficulties and operate successfully at the university?
19. Are there any factors that have helped you to cope with academic reading difficulties? (Factors can be human or non-human, for example, friends, academics, library facilities, reading groups, feedback from your supervisor, and so on.)
20. Have you ever received academic English language support at the university? If yes, what do you think about it? How useful has it been? If no, what kind of language support you would like to receive?

Appendix 4: Example of The Second- Round Interview

Schedule

Pre-TAP interview Schedule:

♣ **Demographic information:**

10. Length of enrolment in current academic programme:

11. Are you dyslexic?

♣ **English Language proficiency and usage:**

13. Do you think now that your English now is at enough level to study in the UK?

14. You mentioned that you read every day for academic purposes, do you still read every day or sth has changed?

15. Roughly, how many pages do you usually read a week for academic purposes?

16. You mentioned that you read the title and the introduction and conclusion, do you still read academic texts as you said? Or something has changed?

17. is your reading still guided by assignments or you read to familiarize yourself with the research area?

18. You said that you prefer to read hard copies. Do you still prefer to read hard copies?

19. Does academic reading improve your vocabulary knowledge? If yes, can you explain how?

20. Does academic reading improve your reading speed? If yes, can you explain how?

21. Does academic reading improve your writing ability? If yes, can you explain how?

22. Do you think that your English in the meantime is at a high enough level for studying in the UK?

Post-TAP Interview Schedule:

♣ **Academic reading difficulties:**

21. Do you still think that the unknown vocabulary in academic texts affects your understanding of the content?

22. Your strategy was to check the word in a dictionary; do you still do the same or you find some other strategy?

23. Do you still find it difficult to understand some texts because you lack adequate background knowledge?
24. You mentioned that to overcome the problem of lack of background knowledge you find information from the internet. Do you still do the same?
25. You mentioned that your tutor helped you with some easier texts to overcome the difficulty of complexity of the content, do you still try to find easier texts to read based on your tutor suggestion?
26. Do you still shift between English and Chinese when you read?
27. You also mentioned that you choose articles to read based on date of publication, I mean you prefer to read the latest in publication? Or you have adopted a new criteria to select what to read?
28. Do you think academic reading is challenging because it requires higher level of skill, for example criticality or evaluation rather than merely understanding what the text conveys?
29. Do you still find it difficult to be critical?
30. You mentioned that you find help from other international students at the university (particularly in English language institute) do you still find that helpful? Or you find another way of help?
31. Last time you also mentioned that you find it helpful to discuss subject matter with friends who had a good background in politics, do you still do the same?
32. What do you usually do when you read a specific text with which you are unfamiliar?
33. In the meantime, What problems do you encounter when you read in a second language for academic purposes?
34. Have you tried to use TAP while reading for academic purposes?

Appendix 5: The Study Survey

second stage

Start of Block: I: Introduction:

Q1 Dear Participant,

This study is being conducted to investigate academic reading challenges that students encounter in their academic context, and the compensatory strategies that postgraduate students usually implement. Furthermore, the study will shed light on the correlation between perceived difficulties of academic reading and the score of the academic reading module in International English Language Testing System (IELTS). Your participation is completely voluntarily. Also, you have the right to withdraw at any stage, any information you give will be used solely for the purpose of this research project. your responses will be dealt with in an anonymised form.

You will be asked to provide some demographic details such as your first language, length of stay in the UK etc. The estimated time needed to complete the survey is about 15. For further details, click on the following link further details **If you proceed to click on the take the survey button, this shows your willingness to participate.**

End of Block: I: Introduction:

Start of Block: II: Demographic Details



Q2 You are:

☐ Male (1)

☐ Female (2)

Q3

Your first language:

Q4 When did you start your current academic programme? for example, September, 2016



Q5 How long have you been in the UK?

▼ Less than a year (1) ... More than one year (3)



Q6 Level of study:

▼ Postgraduate diploma (1) ... PhD (4)

Q7 Your subject area:



Q8 Have you attended a pre-session course before you started your programme:

☐ Yes (1)

☐ No (2)



Q9 Did you take IELTS test before you joined this university?

☐ Yes (1)

☐ No (2)

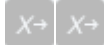
Display This Question:

If Did you take IELTS test before you joined this university? = Yes

Q10 When was the last IELTS test taken? For example, April, 2016)

Display This Question:

If Did you take IELTS test before you joined this university? = Yes



Q11 IELTS overall score

Display This Question:

If Did you take IELTS test before you joined this university? = Yes



Q12 Reading module score in IELTS

Display This Question:

If Did you take IELTS test before you joined this university? = No

Q13 Which English test have you taken before you joined this university? please indicate your score.



Q14 Are you dyslexic? (dyslexia is a lifelong learning difficulty. A person with dyslexia may read and write slowly and confuse the order of letters in words).

☐ Yes (1)

☐ No (2)

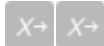
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Q15 For the following sentences, choose the responses that indicate the extent to which you agree with.



Q16 When I first came to the UK, I felt that my English proficiency was not at a high enough level to study at the university.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree not disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q17 I feel now that my English is at a better level to study in the UK.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q18 I feel that my English enables me to operate successfully at the university.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)

End of Block: III:English Language Proficiency

Start of Block: IV: Academic Reading Difficulties



Q19 I can not handle reading large number of resources because of the complex vocabulary used in academic texts.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q20 I find it difficult to be critical when I read for academic purposes.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q21 Criticality in reading is a new concept with which I am not familiar.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q22 Lack of vocabulary knowledge is the most difficult part of academic reading.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q23 Criticality is difficult as it requires a deeper level of analysis, linking ideas and comparisons.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q24 Unknown vocabulary affects my understanding of the text.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q25 If there are too many unknown words, this makes it difficult for me to understand the text.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q26 Most of the words I find difficult are technical.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q27 Technical words are difficult because they are not used in daily life.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q28 If the text uses a different form of a word that I know (for example, include, inclusion, inclusiveness), I find this difficult to understand.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q29 The more time I spend in the academic programme, the more I understand issues and topics in my major.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q30 I cannot understand statistics in academic papers.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not Applicable (0)
-



Q31 I cannot understand some texts because they introduce an advanced level of content.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q32 I cannot understand some texts because they introduce some cultural artefacts (contextual details).

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not Applicable (0)
-



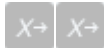
Q33 I find academic papers easier to understand after listening to lecturers' explanations about the topic.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly Disagree (1)
 - ☐ Not applicable (0)
-



Q34 Sometimes I know the meaning of all the words but I cannot understand what the author is trying to say.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q35 There is too much reading and I have no time to do it.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q36 It is difficult to focus on reading because of distractors such as phones.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



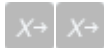
Q37 I find long sentences difficult to understand.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q38 I find the English academic style difficult because it is different from the academic style I am familiar with.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



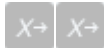
Q39 I read in English and then I try to think about it using my first language.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q40 I find it difficult to read because the core references are not available in hard copies in the university library.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q41 I find it difficult to read if the scanned online books are of poor quality.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)

End of Block: IV: Academic Reading Difficulties

Start of Block: V: Strategies



Q42 While reading, I skip the words I do not know the meaning of.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)
-



Q43 While reading, I skip the unknown words because subsequent sentences might explain the meaning.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)
-



Q44 If I find an unknown word while reading, I try to find the meaning in a dictionary.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not Applicable (0)



Q45 I only check the meaning of unknown words if it affects my understanding.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly Disagree (1)
- ☐ Not applicable (0)



Q46 I use an English-to-English dictionary to find the meaning of the unknown words.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q47 I watch YouTube videos to understand the meaning of some key words.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q48 For unknown words, I try to find the definition in English using either dictionaries or websites such as Wikipedia.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)
-



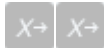
Q49 For unknown words, I try to find synonyms in English to help me understand them.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)
-



Q50 I translate the whole text into my first language using some translation websites to help me understand it.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)
-



Q51 I reread the text to help me comprehend it.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)
-



Q52 I try to find easier texts that introduce the content.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q53 If a text is too complex I ask for help from my supervisor or classmates.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q54 If a text introduces cultural artefacts, I ask for help from a native speaker.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q55 If I find a topic about which I have no background knowledge, I read about it in my first language.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q56 If I find a topic about which I have no background knowledge, I use YouTube to find out about it.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)
-



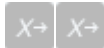
Q57 If I cannot understand a sentence in a reading text, I divide it into different sections to make it easier to understand.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)
-



Q58 If the sentence is too long and I want to understand it, I try to find the subject and the verb.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q59 If there are too many numbers and names, I just skip these details and focus on the words.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q60 I write some notes so that I do not forget what I have read.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q61 To understand long sentences, I highlight the important details and I reread them to make sense of the sentences.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q62 Failing to find a connection between two things in a paragraph would motivate me to Google the connection.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)

End of Block: V: Strategies

Start of Block: VI: Resources



Q63 Facebook group is a facilitating factor that helps me cope with reading difficulties.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not applicable (0)



Q64 My friends who have the same first language are helping me to overcome my reading difficulties.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q65 The linguistic support I receive from INTO helps me overcome my reading problems.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q66 I need linguistic support to overcome reading challenges.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q67 Other international students are helpful and I share knowledge with them to overcome reading challenges.

- ☐ Strongly agree (5)
 - ☐ Agree (4)
 - ☐ Neither agree nor disagree (3)
 - ☐ Disagree (2)
 - ☐ Strongly disagree (1)
 - ☐ Not applicable (0)
-



Q68 I believe that pre-sessional courses are important for all international students even those who have achieved the required IELTS score.

- ☐ Strongly agree (5)
- ☐ Agree (4)
- ☐ Neither agree nor disagree (3)
- ☐ Disagree (2)
- ☐ Strongly disagree (1)
- ☐ Not Applicable (0)

End of Block: VI: Resources

Appendix 6: Information Sheet of The First Phase

An Investigation of Students' Perceptions of Academic Reading Difficulties and Their Association with English Language Proficiency.

Dear Participant,

This study is being conducted by Hana Alrasheed, one of the postgraduate research students at the Graduate School of Education, University of Exeter. The purpose of this study is to investigate academic reading challenges that students encounter in their academic context, and the compensatory strategies that postgraduate students usually implement. Your responses will be insightful in many ways. It would be insightful to university professors to understand where international students might need help in academic reading. In addition, it will be insightful to English as a second language (ESL) students as it might raise their awareness about the academic reading challenges and strategies adopted by other international students to cope with these difficulties. The study will use think aloud reports, and interviews to identify these difficulties. You will be asked to provide some demographic information such as the first language, length of stay in the UK etc. The estimated time needed is as follows:

- Think aloud report: 15 minutes for training how to verbalize academic reading challenges and the use of strategies + approximately 1 hour to perform the experiment.
- Two interviews each 45 minutes.

For further details do not hesitate to contact the researcher using the following email:

hssa202@exeter.ac.uk

Thank you in advance for your help.

Hana AlRasheed

Appendix 7: Consent Form of The First Phase

Title of Research Project

An Investigation of Students' Perceptions of Academic Reading Difficulties and Their Association with English Language Proficiency.

Details of Project

My name is Hana AlRasheed. I am one of the international postgraduate students at the University of Exeter, Graduate school of education. This study is aiming at identifying the academic reading difficulties that international students encounter at postgraduate level. It will also be aiming to explore the strategies that students use to overcome the reading difficulties. These difficulties are going to be discussed in the light of English language proficiency particularly the IELTS reading module sub-score.

Contact Details

For further information about the research /think aloud reports, please contact:

Name: Hana AlRasheed

Postal address: Graduate School of Education
St Luke's Campus
Heavitree Road
Exeter
EX1 2LU

Telephone: 00 44 (0) 7721174435.

Email: hssa202@exeter.ac.uk.

If you have concerns/questions about the research you would like to discuss with someone else at the University, please contact my supervisor:

Dr.Philip Durrant, Email: P.L.Durrant@exeter.ac.uk

Consent

I have been fully informed about the aims and purposes of the project. I give my consent to participate in this research through think aloud reports and interviews.

I understand that:

- there is no compulsion for me to participate in this research project and, if I do choose to participate, I may withdraw at any stage;
- I have the right to refuse permission for the publication of any information about me;
- any information which I give will be used solely for the purposes of this research project, which may include publications or academic conference or seminar presentations;
- the information, which I give, will be seen by the researcher herself, transcriber and her supervisor in an anonymised form;
- all information I give will be treated as confidential;

- the reports and interviews will be audiotaped and transcribed afterwards and I have the right to refuse to use any verbatim responses if research is published;
- the researcher will make every effort to preserve my anonymity.

☐ I give my permission to use my verbatim responses if research is published.

☐ I do not give permission to use my verbatim responses if research is published.

.....
(Signature of participant)

.....
(Date)

.....
(Printed name of participant)

.....
(Printed name of researcher)

.....
(Signature of researcher)

One copy of this form will be kept by the participant; a second copy will be kept by the researcher(s).

Your contact details are kept separately from your think aloud reports and interview data.

Data Protection Notice

The information you provide will be used for research purposes and your personal data will be processed in accordance with current data protection legislation and the University's notification lodged at the Information Commissioner's Office. Your personal data will be treated in the strictest confidence and will not be disclosed to any unauthorised third parties. The results of the research will be published in anonymised form. The survey data will be kept electronically in the University UDrive.

Many thanks

Hana AlRasheed

Appendix 8: Information Sheet of The Second Phase (email message)

If you are one of the international students, at postgraduate level and in your first year of academic programme please read through the following.

Dear all,

I am Hana AlRasheed, one of the international postgraduate students at the University of Exeter, Graduate school of education. I am sending you the link to my study survey that is aiming at identifying the academic reading difficulties that international students encounter at postgraduate level. It will also be aiming to explore the strategies that students use to overcome the reading difficulties. These difficulties are going to be discussed in the light of English language proficiency particularly the IELTS reading module sub-score. Participants should be international students pursuing their studies at post graduate level (diploma, masters' PhD, EdD) and in their first year of academic programme.

Your responses will be insightful in many ways. It would be insightful to university professors to understand where international students might need help in academic reading. In addition, it will be insightful to English as a second language (ESL) students as it might raise their awareness about the academic reading challenges and strategies adopted by other international students to cope with these difficulties.

There is no compulsion for you to participate in this research project and, if you do choose to participate, you may withdraw at any stage. In addition, any information which you give will be used solely for the purposes of this research project, which may include publications or academic conference.

You may need 10-15 minutes to complete the survey. For more details and to take the survey please click on the following link.

Many thanks

Hana

https://exeterssis.eu.qualtrics.com/jfe/form/SV_1XjhUulk6bGb1K5

Appendix 9: A Sample of Transcription

Time and place: Giraffe House, room number 37 b.

Time: Monday 10/10/2016 12.30 pm.

Recording no.5. The first round of interviews.

Me: Your first language?

Participant 1: Arabic.

Me: how long have you been in the UK?

Participant 1: 9 months.

Me: Length of enrolment in the current academic program?

Participant 1: since 19th of September. So we can say three weeks.

Me: level of study?

Participant 1: master's.

Me: your subject area?

Participant 1: special educational needs.

Me: when was the last IELTS test taken?

Participant 1: in May 2016.

Me: your IELTS score?

Participant 1: 5.5.

Me: and your reading score?

Participant 1: 6.

Me: let's start. How frequently do you read for academic purposes?

Participant 1: mm, sometimes three times per week.

Me: okay. How many pages do you usually read a week for academic purposes?

Participant 1: mm from 5 to 10.

Me: okay and what specific processes do you follow when you read for academic purposes?

Participant 1: mm the first I read the title, then abstract to make sure is relevant to my subject or not. Then, I select which ideas or information I want.

Me: okay, so you do not read the whole passage?

Participant 1: no, no, after that I will read the whole passage.

Me: so, how do you decide on what to read on your degree course?

Participant 1: master degree?

Me: I mean what guides you to read, I mean you would have lots of things, what makes you decide to read this paper rather than the other one.

Participant 1: it depends on the title, it depends on the area. For example, my subject is special educational needs. Actually, I read every day about learning disabilities, dyslexia, hyperactive, and something like that.

Me: okay. So, during the last week can you remember what have you read for academic purposes?

Participant 1: yes, of course, about the system of education, education system of special educational needs.

Me: here in the UK ?

Participant 1: no, in Saudi Arabia.

Me: okay, and was that all?

Participant 1: yeah.

Me: can you give a specific purposes that you were reading them for? why were you reading that kind of. .

Participant 1: I have assignments. Yeah, for assignment for this topic. Then I read maybe four articles. One of them about mainstream school, and inclusion also inclusive system yeah.

Me: so they were three, four articles you read about inclusion and specific needs. Okay, so why you were reading them? it is only for assignments?

Participant 1: yeah, for assignment also for me to understand my area.

Me: ok. So do you think that you usually go to find out information if you do not have any kind of assignment, as a kind of habit?

Participant 1: no.

Me: can you give a specific, sorry what sources do you usually read from? I mean do you read journal articles, books, websites?

Participant 1: articles. Journal article.

Me: yeah, you like to read journal articles. okay.

Participant 1: yeah, for the purpose of education but for my life every day, websites and social media.

Me: so you prefer the journal articles. can you tell us why?

Participant 1: because is reliable, it is reliable and academic language.

Me: The language is academic, yes.

Participant 1: yeah.

Me: All right. Okay does academic reading improve your academic vocabulary knowledge?

Participant 1: yes, of course. Vocabulary and writing skills.

Me: okay. Can you explain how?

Participant 1: mmm, yeah, because sometimes when I want to write but just use translate, translate from Arabic to English is very terrible and not English. Sometimes when I read in journal article, I highlight some vocabulary to use in my assignment writing.

Me: Okay, so, does academic reading improve your reading speed?

Participant 1: yes, I think yes. The time every day, weekly, monthly after that I think yeah.

Me: yeah.

Participant 1: because I am at the beginning feel a little bit slowly.

Me: can you explain how?

Participant 1: yeah, because I do not understand a lot of vocabulary but when I read and understand a lot of vocabulary, then I will read faster.

Me: does academic reading improve your writing ability?

Participant 1: yes, of courses, as I mentioned.

Me: yeah. Can you explain how?

Participant 1: sometimes when you read it takes approach how can you write. For example, in article methodology our definition some like that and use it in your writing skills. For example when looking at some articlesin different country. I put it in my assignment the definition of special education in Saudi Arabia. Also, I use view points for the author's point or the author's view. I use some vocabulary. Mm yes sometimes also the grammar.

Me: Yeah, so you think your writing and grammar and generally speaking your writing ability has been improved by your reading, academic reading.

Participant 1: yeah, of course.

Me: ok. When you started this course, do you think that your English was a high enough level of studying in the Uk?

Participant 1: no. Absolutely no.

Me: ok. Can you reflect on that. I mean can you explain why.

Participant 1: mm, my language is just...., I can study with double challenge. yeah, I need a lot of time to translate, sometimes, my teacher or the lecturer said vocabulary I can not find it in translation to Arabic. I have just to understand what the term mean.

Me: yeah, that is right. Okay. So, Challenges are doubled and you need more time and you struggle with some vocabulary. Okay. Let us start now with the think aloud. I want you to read. Imagine that you are reading for academic purposes and you have that article at home and will start reading it.

Participant 1: okay. (She started reading), From concepts to practice in deaf education, a United Kingdom perspective on inclusion. This article considers the different way that inclusion is concept, concept in the United Kingdom by teachers and academics. I content that a concept of inclusion based primarily on the notion of students with special educational need. Being in

mainstream schools is unhelpful to educators of deaf children and that a broader concept is needed. A working definition of inclusion is based on a system of values. I suggest indicators of inclusion for deaf student and it is umm illustrate example of practice. Some basic information on the education of the deaf children in the United Kingdom is included.

umm I understand the main idea and the whole, this part of the.

Me: can you give me the main idea of this part?

Participant 1: Yeah, the main, the approach for the provision of inclusion for deaf students in the UK. um, I think because special education needs is my field, I can understand this but when I read different article in different area absolutely I can not understand it very well.

Me: yeah. Ok. So you think the background knowledge is important.

Participant 1: yes.

Me: okay. Can you tell me what was going on in your mind?

Participant 1: About this passage?

Me: yeah.

Participant 1: I think there is a debate about inclusion may be it is a good idea for deaf children or students or not. But here as the writer said mainstream school is unhelpful to educators of deaf children. um, also in special education needs still there is debate.

Me: in every area Yeah did you find it difficult? this paragraph?

Participant 1: No, not difficult but a little bit, um a few word, for example, indicators.

Me: okay.

Participant 1: yeah, but no effect to understanding the meaning.

Me: okay. Um so this is clearly the very beginning of the passage.

Participant 1: yeah.

Me: and you have one idea about what this passage is going to be. What do you think the idea that is going to be in the passage?

Participant 1: Yeah, I think there is a debate about the disadvantages of profession of inclusion for deaf students or children in the UK. What the government do for, on inclusion these students.

Me: okay.

Participant 1: But I have also difficulty I read aloud, it is easier than when I read silently. Yeah.

Me: so, you think reading aloud is better for you.

Participant 1: yeah.

Me: okay. Can you complete?

Participant 1: Norwich has replaced adjusted that there is a sense in which there are inclusive now. Though, most educators in the United Kingdom would probably accept this, many would find it difficult to determine exactly what they were agreeing about. First, there is confusion over the use of different terms such as inclusion, inclusive, education, inclusivity and social inclusion.

Me: can you stop here and tell me what do you think?

Participant 1: um, here many terms of inclusion but different word family may be but the same meaning, um also talk about the approach or the UK tend to make inclusion.

Me: Yeah, okay Carry on.

Participant 1: Second, there is the confusion of whether inclusion is different integration or mainstreaming and if so in what ways and heard there is confusion over whether inclusion refers to a goal in for example ending. Educational segregation through closing all special schools state , for example, all children educated in mainstream classes, a process for example of increasing participation for children with special needs means to an end. For example, mainstream education as we to better academic outcomes for all.

Me: okay

Participant 1: um, here talk about inclusion different way different, there is inclusion integration and umm education segregation, there is a different way in special education needs, segregation and mainstream classroom to gather students with special educational needs study with normal students. Also, here there is difference between integration and inclusion.

Me: okay. So did you find it difficult this one?

Participant 1: no, it is easy.

Me: okay. Can you read please?

Participant 1: Our value system for example one concerned with the right of all marginalise group. I did not understand marginalised groups but I will carry on. Given that there is confusion there is an urgent need for teachers to develop shared language and understanding of what inclusion means at school and at classroom level. Anecdotal evidence suggests that some policy makers and managers are requiring teachers to be more inclusive and to promote inclusive practice without encouraging and understanding inclusion vasio notions of greater, I did not understand also this. Or they , yeah, is it together or separate?

Me: no, no. separate.

Participant 1: okay. Notions of greater participation is mainstream settings. While notions of common placement and shared learning experiencing are clear relevant is different concept of what it means to be included.

Me: okay. Can you tell me what was going on in your mind?

Participant 1: yeah, slightly difficult.

Me: difficult words?

Participant 1: yeah.

Me: ok.

Participant 1: there is a few difficult vocabulary, Also, um, I understand the general idea about inclusive practice to promote this approach and understand what does inclusive mean and to make share, share the experience of inclusion.

Me: and what would you do when you came across unknown words? what is your strategy? What do you think?

Participant 1: I keep going, I carry on to reading. When stop, I can not understand any thing, in this case, I will translate. But when I understand the general idea I do not stop to translate.

Me: okay. yeah, can you carry on please?

Participant 1: where I stop? Yeah, here, I contend that educators of deaf children and indeed all educators need to be aware of oversimplification and confusion that exist and to work towards a clearer definition of inclusion. That can help guide practice. Therefore, this article has several aims. First, to review briefly concept of inclusion as presented in the lecture and to review the debate on educational inclusion that has been conducted in the UK. Second.

Me: can you stop here and tell me what is going on in your mind?

Participant 1: um, Here, I think the organisational or the direction of article what the article will argue. Or what is the article will discussion, discuss, Yeah, then the writer said in the first what who want to say. The second what he will say.

Me: ok.

Participant 1: the second to describe the UK government position in inclusion. Third, the presence and basic information on the education of deaf children and the relevant to the inclusive debate. Fourth, also here the direction and organisation of the writer what he will argues and what will, what he will debate. The two presents, the fourth to suggest a working definition of educational inclusion relevant to deaf students and fifth to just some indicators for inclusion of students. The drive, oh sorry, that derive from this definition which are illustrated by references to research and other lecturers.

Me: ok. Can you tell me what is going on in your mind now? Did you find it difficult?

Participant 1: umm, not difficult. There are some difficult vocabulary but not struggle me to understand the main idea. I understood the main idea and the organisation, the aim of this article.

Me: okay. Can you move please to the next page.

Participant 1: okay. Dyson 2001 has suggested that practitioner often feel an evitable desire for unequivocal difficult word here guidance on what to do next. However, the indicators for the inclusion presented in this article are not intended as list of does and does not. As I will argue later the meaning incept to the term inclusion and how a definition in the term interpreted into action of highly contextualised. This part I think is difficult. I am not sure about the meaning but umm may be about the definition of inclusion.

Me: okay. So you told me that it is only one word that you do not understand. Does it affect your understanding of the whole passage.

Participant 1: sometimes also I understand a single word but when I read it together, the meaning is lost.

Me: why do you think so?

Participant 1: um , may be because it is not my first language.

Me: okay.

Participant 1: or I need to read a lot in this language.

Me: okay. Can you continue?

Participant 1: Concepts of inclusion and debate about educational inclusion in the UK. For most teachers is primarily about students with special education needs in mainstream schools. Although it is generally seen as a moving point concept of integration and means aiming to incorporate attitude as well as issues placement. However.

Me: okay. Can you stop here and tell me what is going on in your mind.

Participant 1: yeah, here about debate about education inclusion in the UK. What about the inclusion, is mainstream schools or integration. Concepts like this.

Me: okay. You have an idea about this.

Participant 1: Yeah.

Me: did you find it difficult?

Participant 1: umm, sometimes I am not sure about the meaning I understand it very well or not.

Me: okay. So you know the words and you read them but you are not sure you understand it?

Participant 1: yeah, because I had experience before in pre sessional course, I understand something in article and I made a paraphrase for it. The teacher said this is not logical idea. I said no this from article and bring the article the teacher explain no , I misunderstand.

Me: why do you think this case is so? Do you think it is because of style of writing? Or background knowledge.

Participant 1: the most important thing background knowledge, vocabulary and read a lot.

Me: yeah, okay. Can you continue please.

Participant 1: however, as Dyson and Milk (2000) have demonstrated outside the UK. The term is used quite different depending on context and how the term is used reflect particular concerns. They argue that inclusion in some countries is at least as concerned with finding and providing basic education for a wide range of marginalised groups. Street children, worker children from ethnic minorities. Children from remote areas and so on. As it is the transfer of the students special mainstream school is relevantly well resourced. Education system. If we accept this, then it might be possible to agree what inclusion mean in general terms. We have to also understand that inclusion is conceived in each national system in the UK context we must identify what inclusion mean here.

Me: okay.

Participant 1: Here some debates of the definition of inclusion. What the definition exactly as there is difference in its meaning in different countries. It is what inclusion mean in the UK.

Me: okay. Did you find that paragraph difficult?

Participant 1: no. It is easy to understand.

Me: can you complete please.

Participant 1: okay. Will we complete to read the whole?

Me: no.

Participant 1: Even within the UK context the meaning of inclusion is not straightforward. Oh it is a long vocabulary here. Dyson and Milword 2000 say they are not convinced that inclusion is a simple concept and unequivocal practice. I did not understand these three ones. Norwich.

Me: okay can you tell me why is that or what will you do in this case?

Participant 1: I will read it again. Dyson and Milword 2000 say they are not convinced. I did not understand this. That inclusion is a simple concept and equivalently this word is difficult building un.....practice . May be here Dyson and Milkword said that inclusion is simple term to understand and not there is no problem to practice in school may be.

Me: okay.

Participant 1: I am not sure.

Me: so you think your strategy is only rereading. Or may be you have another strategy.

Participant 1: it depends on sometimes I read it again but when I still do not understand anything, I will translate.

Me: okay.

Participant 1: yeah.

Me: then, can you complete.

Participant 1: Norwich 2000 agrees that it is clear that we have quite divergent and incompletable in the concept of inclusion. That is learning in the some place for same curriculum. That is relevant to the system not necessarily to the same place and curriculum and that is not to state at all but an unending process of increasing participation while some writers accepted idea that include primary about student special educational needs in mainstream schools.

Me: can you tell me what is going on in your mind?

Participant 1: Er, Norwich, Norwich definition of inclusion, what inclusion means here, he said in the same place, the same curriculum but other where not in state at all but an ending process of increasing. Yeah. I understand the main idea. The.

Me: definition?

Participant 1: yeah, the definition to inclusion of Norwich.

me: okay. Did you find this paragraph difficult?

Participant 1: umm, no.

Me: okay. Good. Thanks for that. We will start now for the last part of the interview.

Participant 1: Okay.

Me: before we start, can you reflect back on that kind of article. Did you find it difficult and what kind of strategies you will use when you read such kind of article?

Participant 1: in general, the article is easy to understand because I have background about this as you know my subject is educational needs. But, when I read this article before I start my master degree, I can absolutely not understand because three weeks ago I had lecture I select a lot of vocabulary, I understanding mainstream school, inclusion. I understanding the different between inclusion and segregation and integration. When you make this interview before three weeks ago, I can not understand.

Me: okay. You have , You had enough time to read and find out the meaning of some new vocab. Ok, what about you are doing now, do you find some paragraphs more difficult than others.

Participant 1: in this article or?

Me: yeah, in this article.

Participant 1: yeah, of course some parts are easy to understand, sometimes I need to rereading, twice reading and sometimes I translate.

Me: so, let us start now with the interview. The first question : do you think that unknown words impinges upon your understanding of content? I mean do you think unknown words can affect your understanding texts impossible?

Participant 1: yes.

Me: can you explain?

Participant 1: because sometimes when I misunderstand the word or a new vocabulary, a lot of vocabulary like that I can not understand but if there are just a few words it is easy to understand.

Me: so you think it depends on how important the word is?

Participant 1: yeah, is it a key word for example or not?

Me: ok. how about, you mean if it is a key word you will go and find the meaning and if it is not it is fine to leave it.

Participant 1: yeah.

Me: what do you usually do when you read a specific text with unknown vocabulary?

Participant 1: Before that I will read the abstract then sometimes I find key words text or something like that I translate it before.

Me: Yeah.

Participant 1: then, I start to read.

Me: okay. have you ever tried to find academic word list of technical vocabulary before you started your programme?

Participant 1: Yeah. Yes I said to my lecturer about that.

Me: And he provided it?

Participant 1: to vocabulary.

Me: and when did you get that?

Participant 1: In lecture, do you want to see it?

Me: no, I mean was it during these three weeks or before?

Participant 1: yes, during these three weeks. At the first week.

Me: okay. Good. And did you find them helpful?

Participant 1: Yeah, it is very helpful. I understand a lot of vocabulary then I can follow the lecturer when she or he speaks.

Me: have you tried to use dictionary to translate unknown words as you read them? I mean when you are reading do you keep a dictionary by you and keep translating?

Participant 1: It is not helpful or no useful there is a lot of vocabulary and find it in dictionary.

Me: what would you do when you do not understand them?

Participant 1: ask native or teacher or sometimes I read it in the text and understand the meaning.

Me: okay. Have you found yourself unable to comprehend a specific text because of lack of background knowledge?

Participant 1: yeah.

Me: can you explain that? can you tell me more? What kind of stuff you were reading about?

Participant 1: for example, when I read about engineering or business management or something like that I cannot understand it.

Me: okay. How about inclusion and special needs?

Participant 1: I have good background. Not good but just three weeks ago. I read about it and I have lectures about it.

Me: so you think during these three weeks you have had enough information about special needs education. Whereas before these three weeks you had nothing about it. Okay. Can you identify whether it was because of unfamiliarity of the content I mean complex content or it was because unfamiliarity of the culture. For example now when you read something about the United Kingdom context is it sometimes difficult to understand the concept because it is related to the United Kingdom context?

Participant 1: yes.

Me: is it because you have no information about education here and that is why.

Participant 1: I think related to culture related to the UK. For example, two weeks ago we talk about grammar school and academic schools. Yeah, I can not understand what the grammar school, academic school. It is very difficult. It is new for me grammar school. Because in my country just private school and public school.

Me: yeah, you told me that it is related to the culture rather than the content.

Participant 1: yeah, the content is easy to translate but when I do not understand the culture translate nothing.

Me: that is right. So, you think the culture can not be translated. What would you do when you read a specific texts with which you are unfamiliar with?

Participant 1: sometimes give up. Yeah, if it was difficult but sometimes I struggle to read it and translate.

Me: suppose you had an example an article talking about grammar school and you have no idea about grammar school, what would you do? You are unfamiliar with that concept?

Participant 1: ah, I will ask native people. Sometimes I also ask lecturer, I prepare before the lecture.

Me: so with topic you are unfamiliar with because of the complexity of the content, have you ever tried to read some simpler texts. I mean sometimes lecturer has given you some articles that is talking about inclusion but three weeks ago you were unable to understand what inclusion means so you try to find out some simple text talking about inclusion? Have you tried this?

Participant 1: yeah, I tried always. For example, I will read in Arabic language first, then a simple text in English language. Then, I will start.

Me: have you considered rereading the required reading after the lecture? I mean lots of lecturers give some reading list and you have to read them before the lecture, or hopefully you can but have you tried to find some texts? umm, have you tried to read the required reading after the lecture I mean after the lecture, you have this article and you find it difficult and then after the lecture you find it easier to go and read it again. Have you tried this?

Participant 1: yes, I read again to understand it very well.

Me: okay, do you think that introduces some explanation yeah and they give examples so due to it you are able to understand the article itself?

Participant 1: yeah.

Me: so, you tried to read the article again, did you find it easier this time

Participant 1: yeah, of course easier because of the explanation, examples.

Me: okay. Have you tried to find some texts that introduce the same content in your first language?

Participant 1: yes, I think it is very useful.

Me: Really? okay. So what problems do you encounter when you read in a second language for academic purposes?

Participant 1:umm.

Me: you can elaborate any kind of problems you encounter, grammar or words?

Participant 1: yeah, vocabulary, academic style specifically journal article because in the websites it is very easy.

Me: yeah, it is written for the public. What else?

Participant 1: background.

Me: background knowledge?

Participant 1: yeah.

Me: anything else?

Participant 1: no.

Me: Are you keeping up with reading loads?

Participant 1: no.

Me: are you able to read what is required from you to read?

Participant 1: yes.

Me: do you read all the suggested reading?

Participant 1: no, not all.

Me: before the lecture you read them all?

Participant 1: yeah.

Me: good, so you are able to read the whole list.

Participant 1: no, no not the whole list. Just the power point and the lecture. Not the reading list. The reading list I select of them.

Me: so, you do not read the whole list?

Participant 1: no, no I do not have a lot of time.

Me: is it only the time?

Participant 1: sometimes motivation. I do not like reading. Just for study.

Me: okay. So you do not read all what is required from you because of time or lack of motivation but you understand that you have to read them. So, you probably go to select what is important and then read the power point slides.

Participant 1: yeah.

Me: if not what factors have prevented you from reading them in a reasonable time? Because some student say it takes us very very long time. So what factors make reading for ESL students I mean international students taking a very long time.

Participant 1: language barriers, sometimes misunderstanding, not easy to read, they need a lot of time, also style is different, critical thinking. It is very difficult to understand.

Me: you said you were unable to read because you have to think critically about the content. Is that the case all the time?

Participant 1: yeah.

Me: ok. Some students report that they read slowly because they make a shift between their first language and English. You know what I mean.

Participant 1: it is different when I translate.

Me: no, I mean, they read this sentence and they try to translate it in their first language, they try to understand it then come back to.

Participant 1: yeah, yes.

Me: How about you? You do the same?

Participant 1: yes.

Me: So you shift between Arabic and English all the time? So you do not think in English?

Participant 1: I think a lot of time after three months I will think in English, not in Arabic. Because it is different meaning sometimes.

Me: what do you usually do when you have a massive amount of required reading and only you have a limited time to do them?

Participant 1: yeah, I will read the abstract and the subheading, introduction and the conclusion.

Me: okay. and how about the titles for example you have let us say ten articles, or eight articles, you go over only abstract, introduction and conclusion but what to choose one or two which is more relevant.

Participant 1: yeah, the more relevant, I will read it deeply.

Me: So , you may select rather than reading introduction and conclusion. Okay. Do you think academic reading is challenging because of the differences in structures between your first language and English.

Participant 1: yes, of course. Reading is challenging, double challenging for international students.

Me: yeah, Okay, in other words do you think reading in English is influenced by your first language? I mean the style of writing in Arabic, the way of writing, even the way of starting the page from right to left is totally the opposite of English, so think because they are opposite it makes it very difficult for you?

Participant 1: umm, yeah. Of course.

Me: and do you think academic reading is challenging because it requires a higher level of skill, for example criticality, evaluation, rather than merely understanding what the text conveys.

Participant 1: yes, the criticality is more important in reading to write critically analysis.

Me: can you summarise what do they mean when they say critically?

Participant 1: not to judge, to say it is understanding the view and the opinion under the line reading.

Me: yeah, trying to understand the hidden ideas? And you think this is going to be a challenge as you do not have only to read and understand the words.

Participant 1: yeah, because sometimes native people have some challenges with critical.

Me: so it is not related to language barrier or linguistic proficiency?

Participant 1: yeah, sometimes some students have a high level of English language but they do not have critical thinking.

Me: And you think critical reading is an important part of academic reading?

Me: yeah.

Me: do you think that above all you are able to cope with academic reading difficulties and operate successfully at the University?

Participant 1: yeah.

Me: do you think so?

P1: yeah.

Me: even if you have difficulties you will be able to cope with them they are not that much challenging that would stop your understanding.

Participant 1: no, there are some challenges, but students can not, can sorry and able to understand and study and have a good high of score.

Me: yeah, so are there any factors that have helped you to cope with academic reading difficulties? I mean factors can be human or non human. For example, friends, library facilities, reading groups, feedback from supervisor?

Participant 1: yes.

Me: what kind of factors that helped you cope with academic reading?

Participant 1: supervisor, sometimes friends.

Me: so the supervisor explains to you.

Participant 1: yeah, library, friends.

Me: do you have reading group? With your friends?

Participant 1: yeah, on facebook.

Me: so reading group in facebook. And how about library facilities?

Participant 1: a good facilities, a lot of sources to take knowledge.

Me: lots of references. Is there any other kind of.

Participant 1: tutor.

Me: yeah, your tutor and academic lectures. Okay, the last question, have you ever received academic English language support at the university? I mean after you start your programme?

Participant 1: no.

Me: I found some language support by myself on the internet, some websites to make proof reading just like this.

Me: Okay.

Participant 1: but I think a lot of support for international students in INTO building .

Me: and you did not get that kind of help?

Participant 1: no.

Me: okay. what do you think what kind of support can be introduced to international students?

Participant 1: may be it is useful to improve grammar and critical thinking may be. Also how can you select the idea from article. How can you make paraphrase, summarise. May be they support students to improve their writing skills and reading skills.

Me: yeah, and how about reading, how do they, what kind of support do you want to receive as student?

Participant 1: may be give students some technical to read faster, or to understand the main idea, for example to write the first sentence of paragraph or to skimming or scanning yeah, it is skills needed just training.

Me: so you think even if you have been told how to do these skills you need constant English language support during your study so that you can be better in reading?

Participant 1: yeah.

Me: is there anything I have forgotten to ask about, I mean with regard to reading difficulties and strategies you adopt to overcome these difficulties?

Participant 1: no, thank you , But I want to say reading skills is related to writing skills. When you improve your reading skill, you will be fine in writing skill.

Me: Is there any kind of, I mean kind of ideas that this interview has awaken in your mind, is there like strategies you have came to understand that you can use them in reading.

Participant 1: umm, from now I need to read a lot about reading list. Yeah, read a lot to make a good background and read faster.

Me: I would like to also ask about one important thing about think aloud protocol that we have just practiced, do you think it has changed something in you with regard to reading.

Participant 1: I proud of myself when I understand this because I have a background about this lot of vocabulary in this area, now I will read a lot and take vocabulary in my area to help me let my title of dissertation and to think about the list of reading for my dissertation.

Me: Okay, does it tell you something about your own reading?

Participant 1: yeah, where is my weaknesses and where is my strength.

Me: can you identify what are your weaknesses?

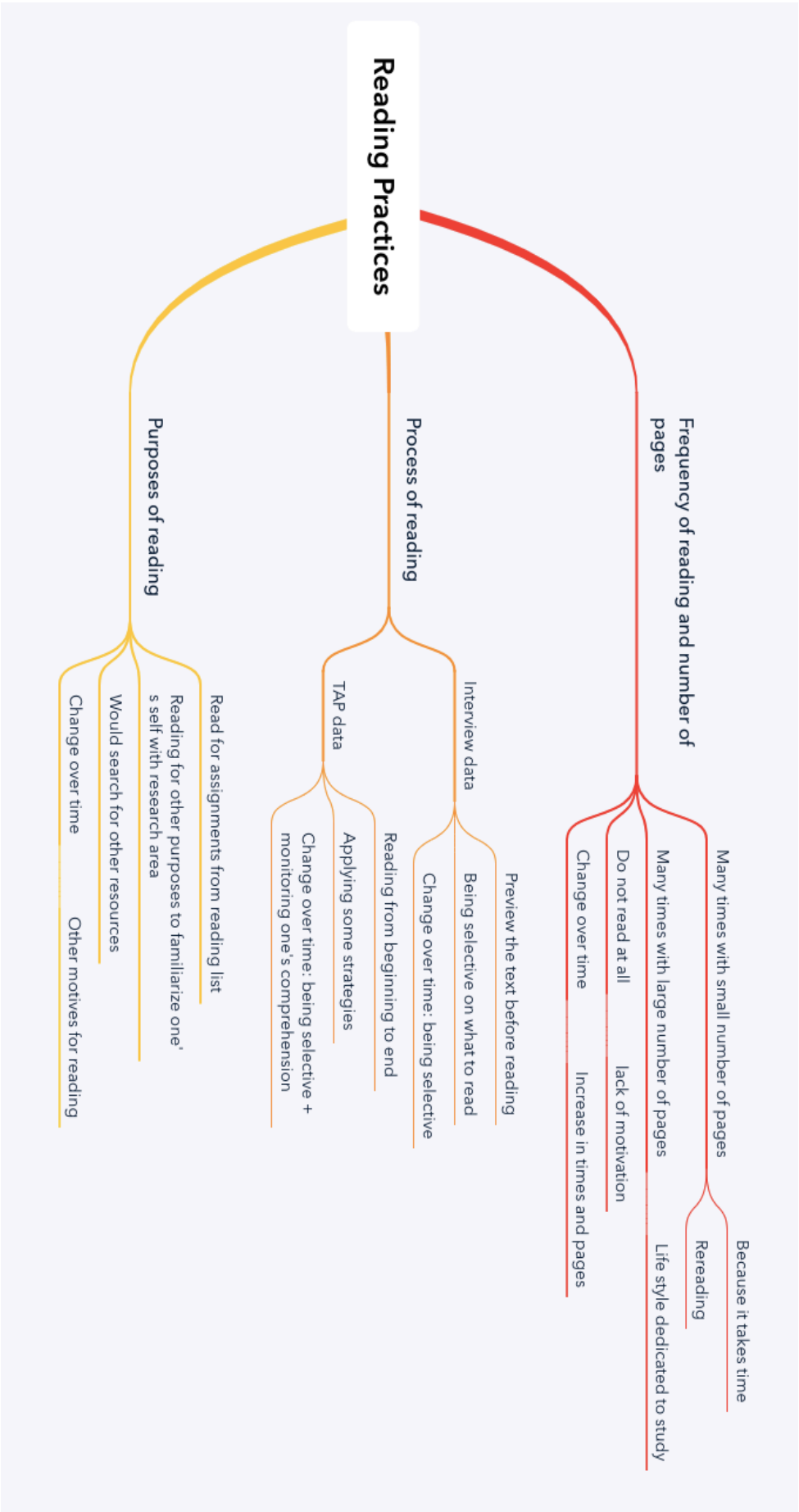
Participant 1: my Weaknesses is sometimes I read but I understand in different way. My weaknesses also vocabulary, I need a lot of vocabulary just that.

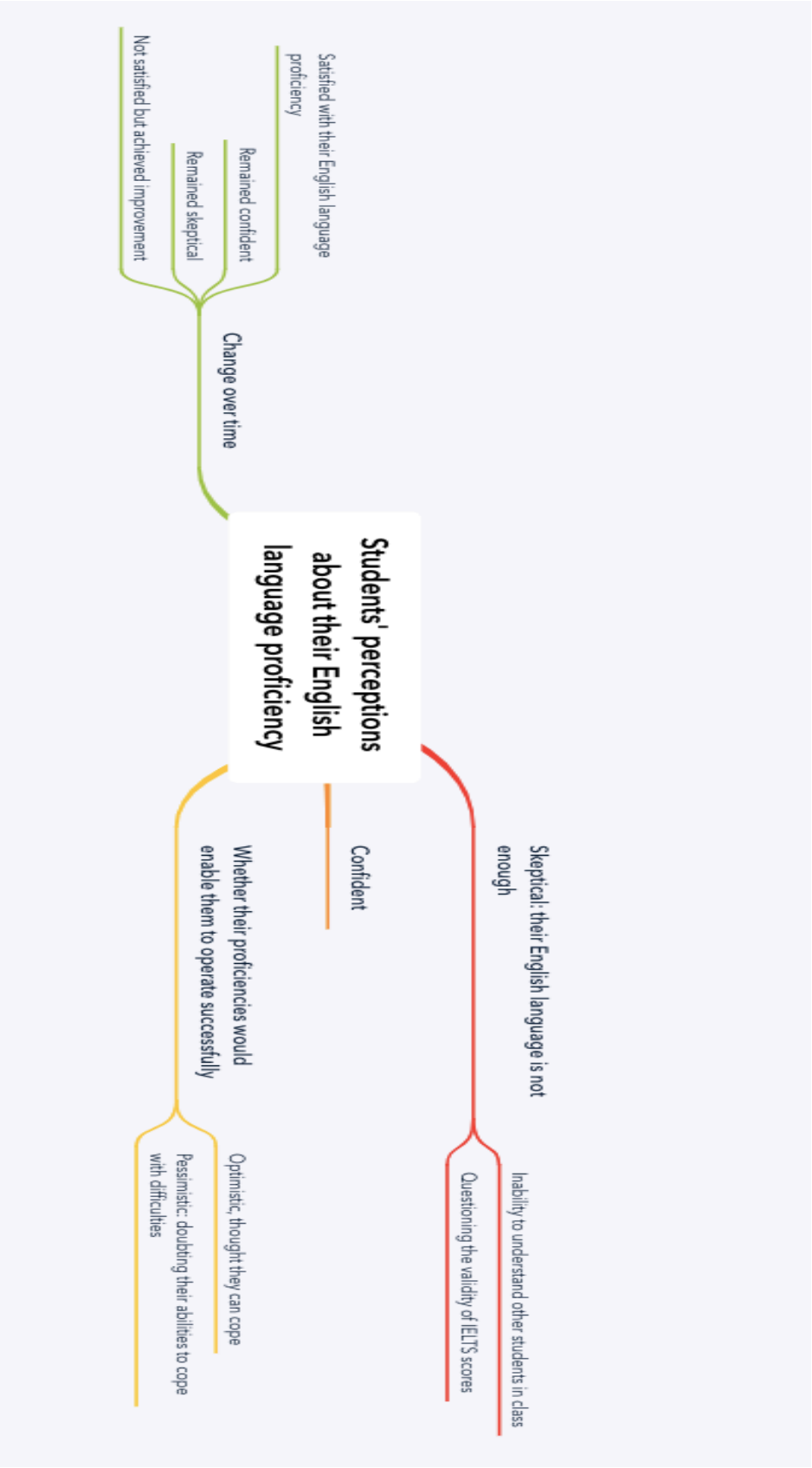
Me: okay. Thank you so much for your help. Nice to meet you. I hope this can help you in your studies.

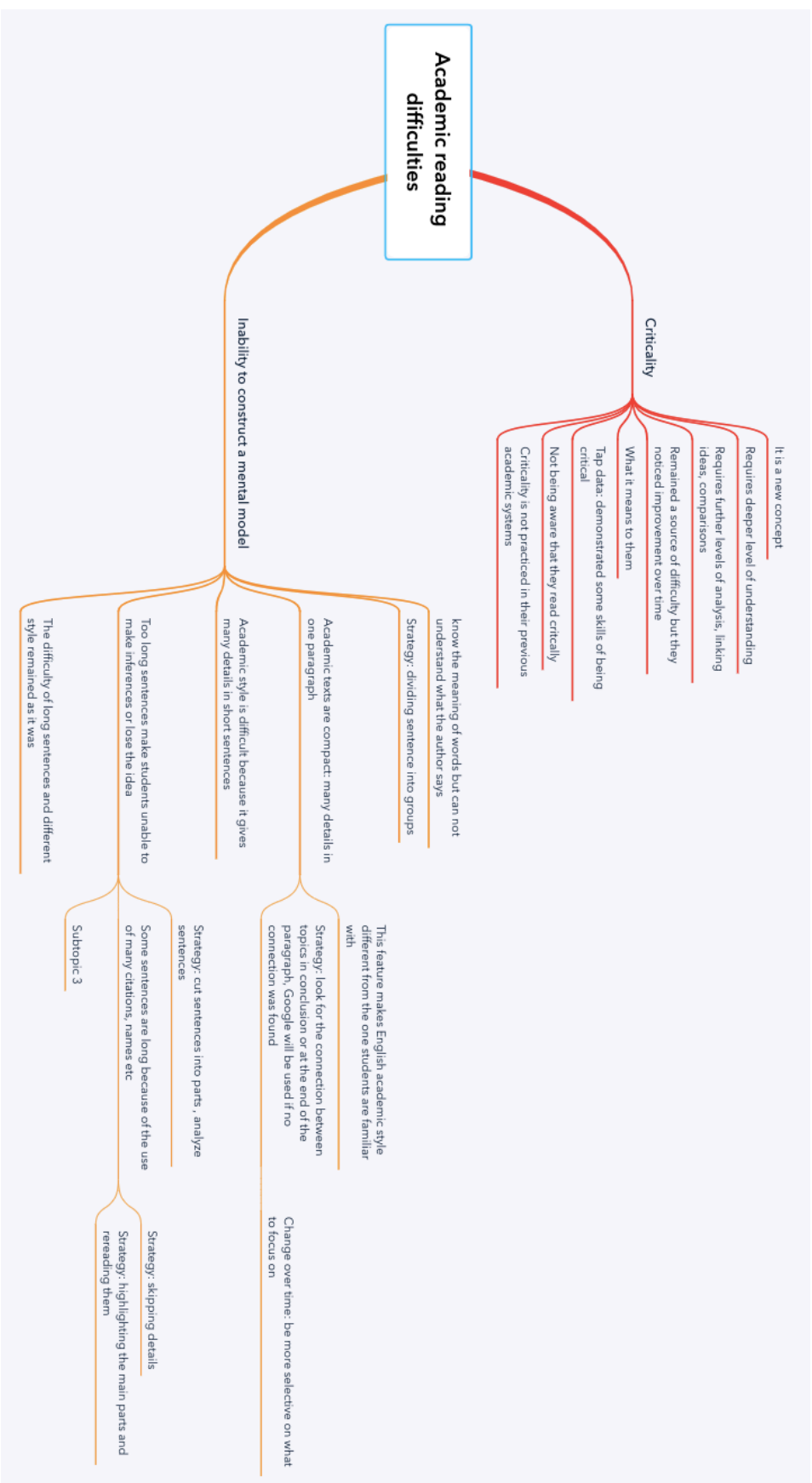
Participant 1: thanks.

The end of TAP and interview 1.

Appendix 10: A Sample of Codes







Appendix 11: Sample of Coding Stage

| Data | Codes |
|---|--|
| <p>Me: have you tried to use dictionary to translate unknown words as you read them? I mean when you are reading do you keep a dictionary by you and keep translating?</p> <p>Participant 1: It is not helpful or no useful there is a lot of vocabulary and find it in dictionary.</p> <p>Me: what would you do when you do not understand them?</p> <p>Participant 1: ask native or teacher or sometimes I read it in the text and understand the meaning.</p> | <p>Strategy to cope with unknown words: Ask native speaker, teacher or rereading to guess the meaning from context</p> |
| <p>Me: okay. Have you found yourself unable to comprehend a specific text because of lack of background knowledge?</p> <p>Participant 1: yeah.</p> <p>Me: can you explain that? can you tell me more? What kind of stuff you were reading about?</p> <p>Participant 1: for example, when I read about engineering or business management or something like that I cannot understand it.</p> | <p>Academic reading difficulty: lack of background knowledge</p> |
| <p>Me: okay. How about inclusion and special needs?</p> <p>Participant 1: I have good background. Not good but just three weeks ago. I read about it and I have lectures about it.</p> <p>Me: so you think during these three weeks you have had enough information about special needs education. Whereas before these three weeks you had nothing about it. Okay. Can you identify whether it was because of unfamiliarity of the content I mean complex content or it was because unfamiliarity of the culture. For example now when you read something about the United Kingdom context is it sometimes difficult to understand the concept because it is related to the United Kingdom context?</p> <p>Participant 1: yes.</p> <p>Me: is it because you have no information about education here and that is why.</p> <p>Participant 1: I think related to culture related to the UK. For example, two weeks ago we talk about grammar school and academic schools. Yeah, I can not understand what the grammar school, academic school. It is very difficult. It is new for me grammar school. Because in my country just private school and public school.</p> | <p>Students noticed the effect of time to familiarize them with majors</p> |
| <p>Me: yeah, you told me that it is related to the culture rather than the content.</p> <p>Participant 1: yeah, the content is easy to translate but when I do not understand the culture translate nothing.</p> <p>Me: that is right. So, you think the culture can not be translated. What would you do when you read a specific texts with which you are unfamiliar with?</p> | <p>Some texts introduce culture-specific information</p> |
| <p>Participant 1: sometimes give up. Yeah, if it was difficult but sometimes I struggle to read it and translate.</p> | <p>Translating did not work with this kind of difficulty</p> |

| | |
|--|---|
| <p>Me: suppose you had an example an article talking about grammar school and you have no idea about grammar school, what would you do? You are unfamiliar with that concept?</p> <p>Participant 1: ah, I will ask native people. Sometimes I also ask lecturer, I prepare before the lecture.</p> | <p>Strategy: seeking help in English.</p> |
| <p>Me: so with topic you are unfamiliar with because of the complexity of the content, have you ever tried to read some simpler texts. I mean sometimes lecturer has given you some articles that is talking about inclusion but three weeks ago you were unable to understand what inclusion means so you try to find out some simple text talking about inclusion? Have you tried this?</p> <p>Participant 1: yeah, I tried always. For example, I will read in Arabic language first, then a simple text in English language. Then, I will start.</p> | <p>Strategy : searching for easier texts and reading in L1</p> |
| <p>Me: have you considered rereading the required reading after the lecture? I mean lots of lecturers give some reading list and you have to read them before the lecture, or hopefully you can but have you tried to find some texts? umm, have you tried to read the required reading after the lecture I mean after the lecture, you have this article and you find it difficult and then after the lecture you find it easier to go and read it again. Have you tried this?</p> <p>Participant 1: yes, I read again to understand it very well.</p> <p>Me: okay, do you think that introduces some explanation yeah and they give examples so due to it you are able to understand the article itself?</p> <p>Participant 1: yeah.</p> <p>Me: so, you tried to read the article again, did you find it easier this time</p> <p>Participant 1: yeah, of course easier because of the explanation, examples.</p> <p>Me: okay. Have you tried to find some texts that introduce the same content in your first language?</p> <p>Participant 1: yes, I think it is very useful.</p> <p>Me: Really? okay. So what problems do you encounter when you read in a second language for academic purposes?</p> <p>Participant 1:umm.</p> <p>Me: you can elaborate any kind of problems you encounter, grammar or words?</p> <p>Participant 1: yeah, vocabulary, academic style specifically journal article because in the websites it is very easy.</p> <p>Me: yeah, it is written for the public. What else?</p> <p>Participant 1: background.</p> | <p>Strategy: rereading to understand and it makes reading easier</p> |
| | <p>Strategy: reading in L1.</p> |
| | <p>Academic reading difficulties: lack of vocabulary knowledge, academic style and lack of background knowledge</p> |

Appendix 12: First Ethical Certificate



GRADUATE SCHOOL OF EDUCATION

St Luke's Campus
Heavitree Road
Exeter UK EX1 2LU

<http://socialsciences.exeter.ac.uk/education/>

CERTIFICATE OF ETHICAL APPROVAL

Title of Project: An Investigation of Predictive Validity of IELTS in Relation to Students' Perceptions of Academic Reading Difficulties.

Researcher(s) name: Hana Alrasheed


Supervisor(s): Phil Durrant
Esmaeel Abdulazadeh

This project has been approved for the period

From: 10/07/2016
To: 30/09/2019

Ethics Committee approval reference:

D/15/16/50

Signature:  Date: 05/07/2016
(Dr Philip Durrant, Chair, Graduate School of Education Ethics Committee)



Appendix 13: Second Ethical Certificate



GRADUATE SCHOOL OF EDUCATION

St Luke's Campus
Heavitree Road
Exeter UK EX1 2LU

<http://socialsciences.exeter.ac.uk/education/>

CERTIFICATE OF ETHICAL APPROVAL

Title of Project: An Investigation of Predictive Validity of IELTS in Relation to Students' Perceptions of Academic Reading Difficulties.

Researcher(s) name: Hana Sulaiman AlRasheed

Supervisor(s): Philip Durrant
Esmaeel Abdulzadeh

This project has been approved for the period

From: 12/07/2017
To: 30/09/2019

Ethics Committee approval reference:

D/16/17/51

A handwritten signature in black ink, appearing to read 'V. Baumfield'.

Signature: (Professor Vivienne Baumfield, Director of Research, Graduate School of Education)

Date: 12/07/2017

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